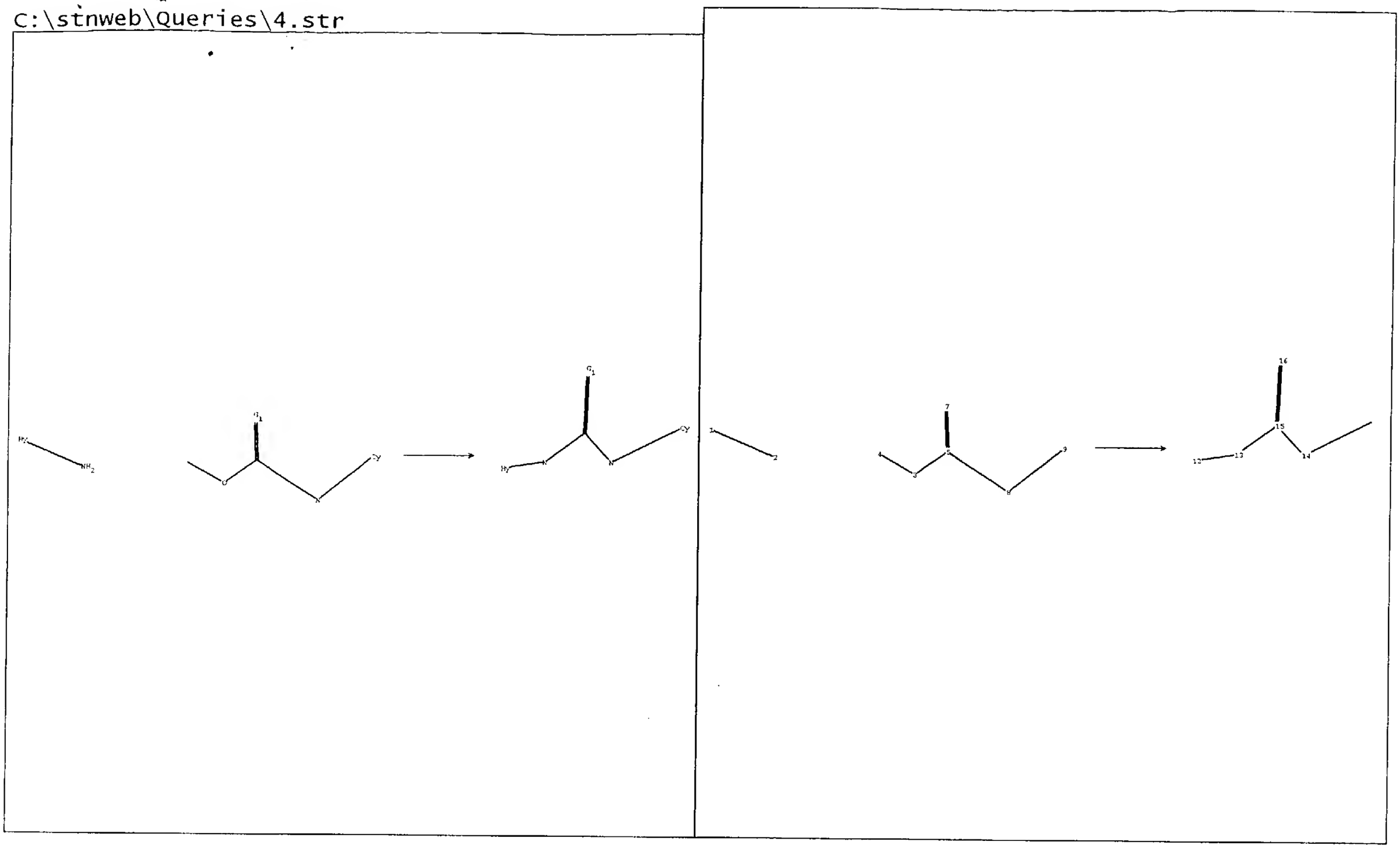
C:\stnweb\Queries\4.str



chain nodes :
1 2 3 5 7 8 9 12 13 14 15 16 18
ring/chain nodes :
4
chain bonds :
1-2 3-4 3-5 5-7 5-8 8-9 12-13 13-15 14-15 14-18 15-16
exact/norm bonds :
1-2 3-4 3-5 5-7 5-8 8-9 12-13 13-15 14-15 14-18 15-16

G1:O,S

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 9:Atom 12:Atom 13:CLASS
14:CLASS 15:CLASS 16:CLASS 18:Atom
fragments assigned reactant role:
containing 1
containing 3
fragments assigned product role:
containing 12

```
INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HOME' AT 18:45:32 ON 20 JUN 2004
FILE 'HOME' ENTERED AT 18:45:32 ON 20 JUN 2004
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

=> file reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'REGISTRY' ENTERED AT 18:45:39 ON 20 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   18 JUN 2004  HIGHEST RN 695815-39-5
DICTIONARY FILE UPDATES:  18 JUN 2004  HIGHEST RN 695815-39-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
L1       STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1                STR
```
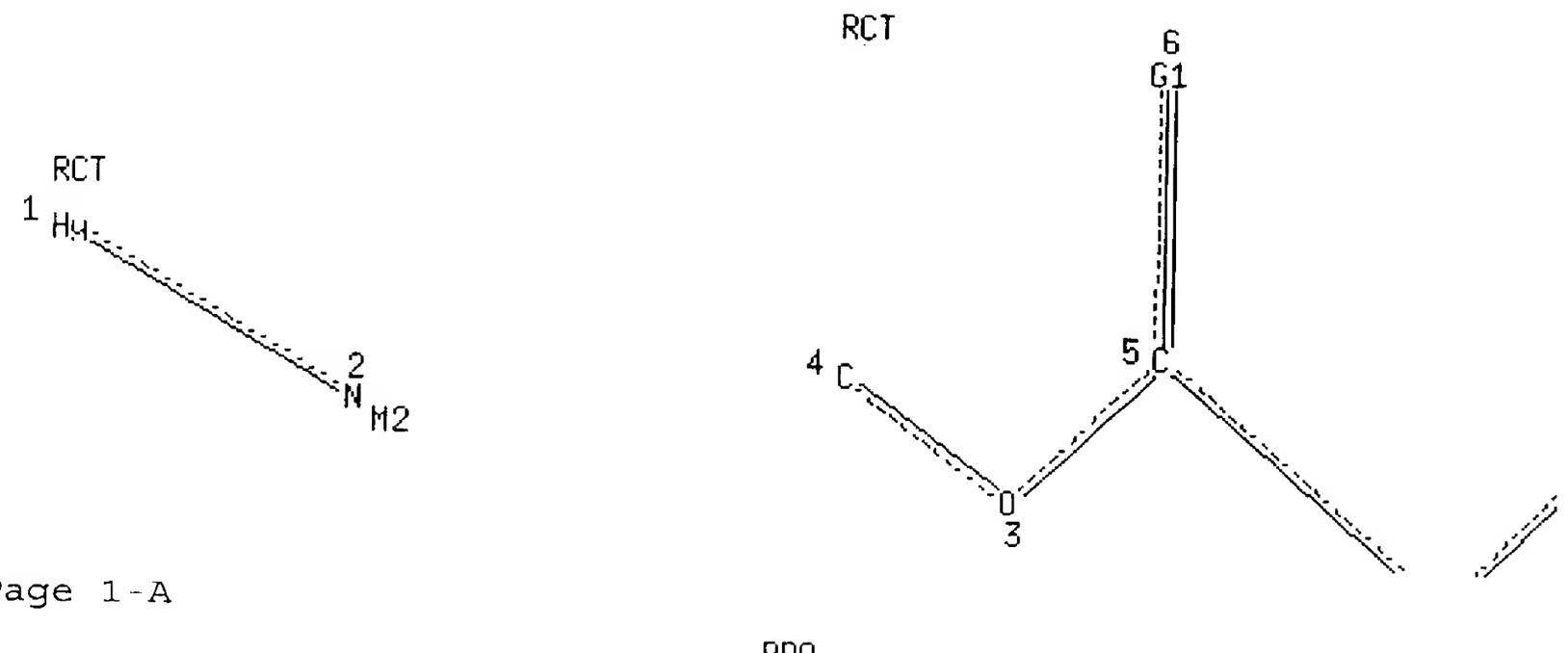
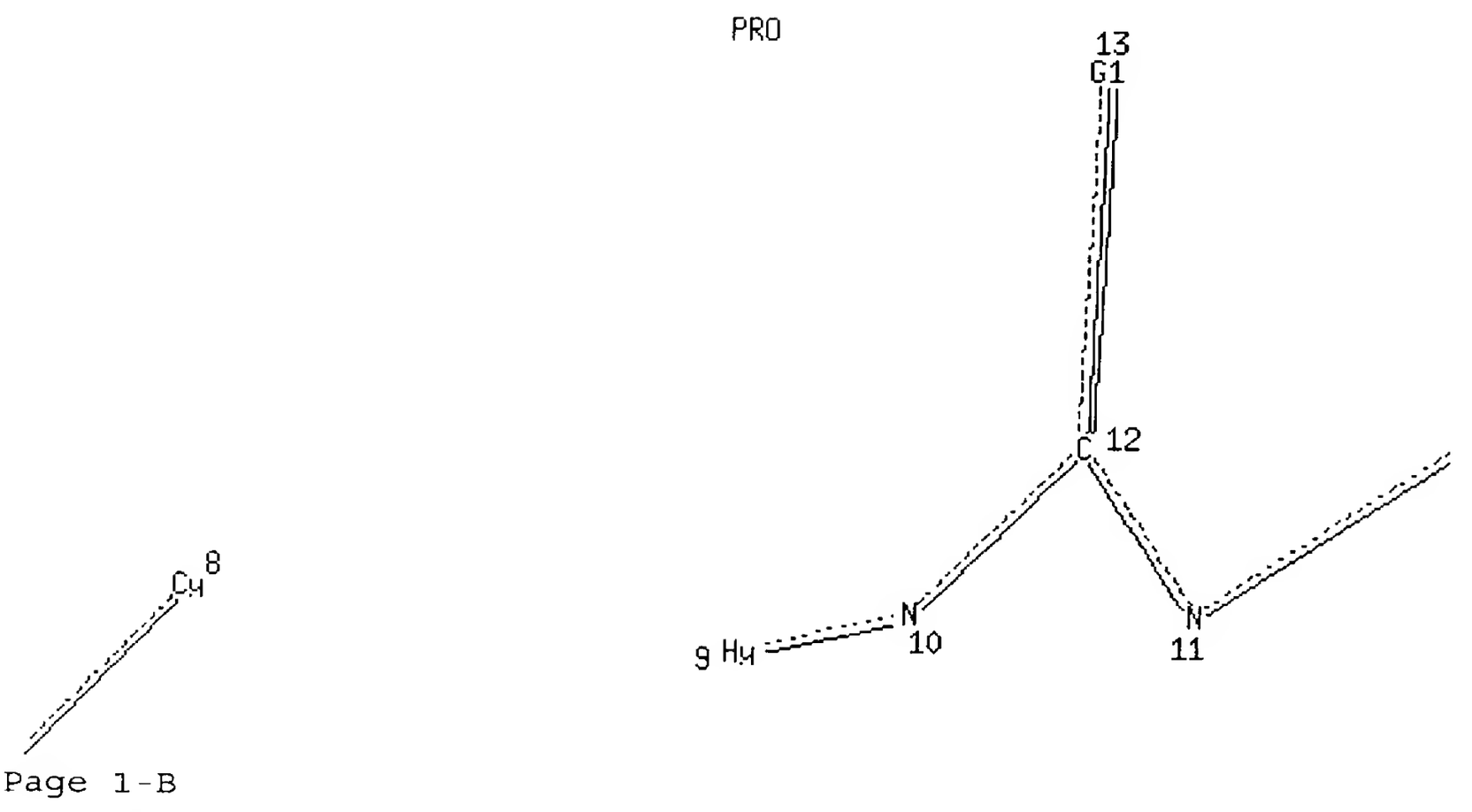
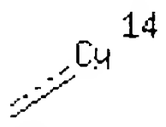

0 15 S 16



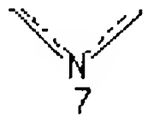
Page 1-A



Page 1-B



Page 1-C



Page 2-A
VAR G1=15/16
NODE ATTRIBUTES:

HCOUNT	IS M2	AT	2
NSPEC	IS C	AT	1
NSPEC	IS C	AT	2
NSPEC	IS C	AT	3

```
NSPEC    IS RC      AT   4
NSPEC    IS C       AT   5
NSPEC    IS C       AT   6
NSPEC    IS C       AT   7
NSPEC    IS C       AT   8
NSPEC    IS C       AT   9
NSPEC    IS C       AT  10
NSPEC    IS C       AT  11
NSPEC    IS C       AT  12
NSPEC    IS C       AT  13
NSPEC    IS C       AT  14
DEFAULT MLEVEL IS ATOM
MLEVEL   IS CLASS  AT   2  3  4  5  7 10 11 12 15 16
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE


=> s l1
MULTIPLE ROLE QUERIES ARE NOT ALLOWED IN A NON-REACTION FILE

=> file casreact
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY      SESSION
FULL ESTIMATED COST                                    2.94         3.15

FILE 'CASREACT' ENTERED AT 18:49:39 ON 20 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
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Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 20 Jun 2004 VOL 140 ISS 25

**********************************************************
*                                                        *
*     CASREACT now has more than  8 million reactions    *
*                                                        *
**********************************************************

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file
and provided by InfoChem and some records are produced using some INPI
data from the period prior to 1986.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

Crossover limits have been increased.  See HELP RNCROSSOVER for details.

Structure search limits have been raised.  See HELP SLIMIT for the new,
higher limits.

=>
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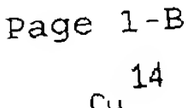
L2 STRUCTURE UPLOADED

=> d 12
L2 HAS NO ANSWERS
L2 STR

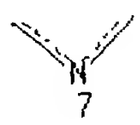
0 15 S 16

Page 1-A

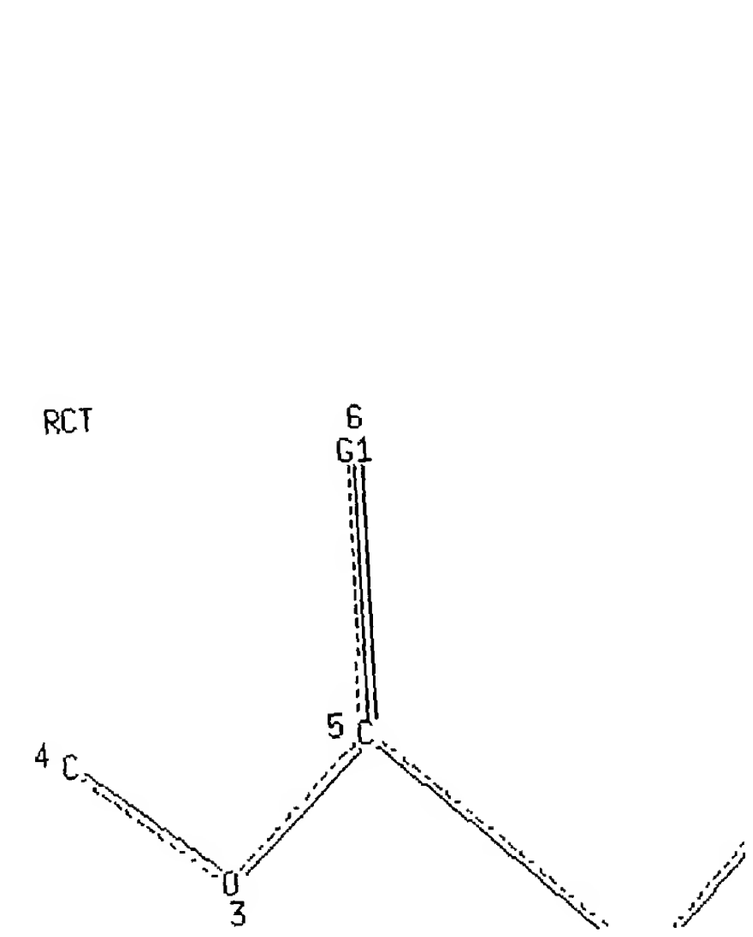
Page 1-B

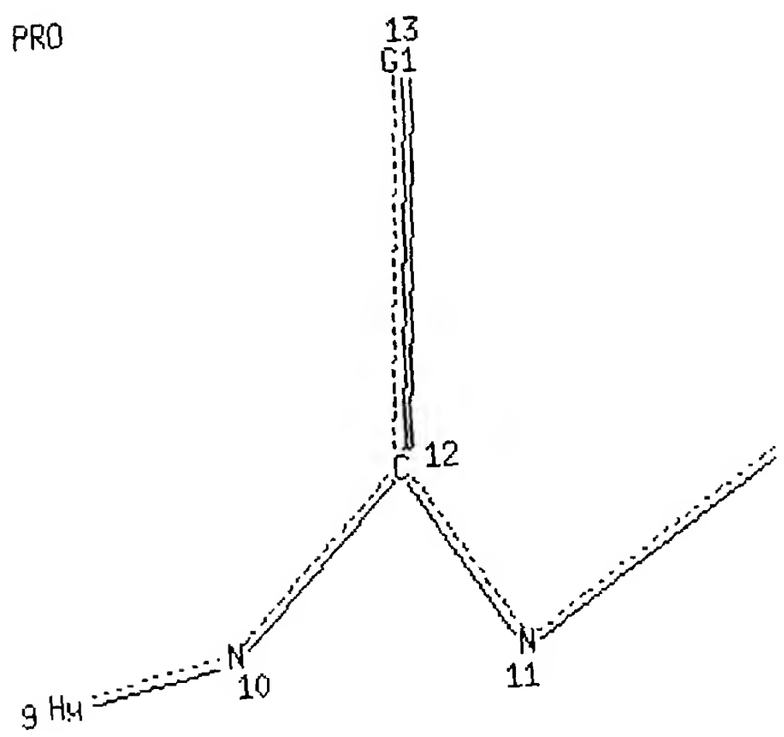


Page 1-C



Page 2-A
VAR G1=15/16





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NODE ATTRIBUTES:
HCOUNT  IS M2      AT   2
NSPEC   IS C       AT   1
NSPEC   IS C       AT   2
NSPEC   IS C       AT   3
NSPEC   IS RC      AT   4
NSPEC   IS C       AT   5
NSPEC   IS C       AT   6
NSPEC   IS C       AT   7
NSPEC   IS C       AT   8
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NSPEC   IS C       AT  11
NSPEC   IS C       AT  12
NSPEC   IS C       AT  13
NSPEC   IS C       AT  14
DEFAULT MLEVEL IS ATOM
MLEVEL  IS CLASS  AT   2  3  4  5  7 10 11 12 15 16
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  16

STEREO ATTRIBUTES: NONE


=> s 12
SAMPLE SEARCH INITIATED 18:49:59 FILE 'CASREACT'
SCREENING COMPLETE -     736 REACTIONS TO VERIFY FROM      83 DOCUMENTS

100.0% DONE     736 VERIFIED        1 HIT RXNS                          1 DOCS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED VERIFICATIONS:      13094 TO     16346
PROJECTED ANSWERS:                1 TO        79

L3              1 SEA SSS SAM L2 (      1 REACTIONS)

=> s 12 full
THE ESTIMATED SEARCH COST FOR FILE 'CASREACT' IS 102.30 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 18:50:04 FILE 'CASREACT'
SCREENING COMPLETE -  13384 REACTIONS TO VERIFY FROM    1414 DOCUMENTS

100.0% DONE  13384 VERIFIED       82 HIT RXNS                         14 DOCS
SEARCH TIME: 00.00.02

L4             14 SEA SSS FUL L2 (     82 REACTIONS)

=> d l4, ibib abs fhitstr, 1-14
'FHITSTR' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

The following are valid formats:

ABS -------- GI and AB
ALL -------- BIB, AB, IND, RE, Single-step Reactions
APPS ------- AI, PRAI
```

```
BIB -------- AN, plus Bibliographic Data
CAN -------- List of CA abstract numbers without answer numbers
CBIB ------- AN, plus Compressed Bibliographic Data
DALL ------- ALL, delimited (end of each field identified)
IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IBIB ------- BIB, indented with text labels
IND -------- Indexing data
IPC -------- International Patent Classifications
ISTD ------- STD, indented with text labels
OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

MAX -------- Same as ALL
PATS ------- PI, SO
SCAN ------- TI and FCRD (random display, no answer number.  SCAN
             must be entered on the same line as DISPLAY, e.g.,
             D SCAN.)
SSRX ------- Single-Step Reactions (Map, Diagram, and Summary for
             all single-step reactions)
STD -------- BIB, IPC, and NCL

CRD -------- Compact Display of All Hit Reactions
CRDREF ----- Compact Reaction Display and SO, PY for Reference
FHIT ------- Reaction Map, Diagram, and Summary for first
             hit reaction
FHITCBIB --- FHIT, AN plus CBIB
FCRD ------- First hit in Compact Reaction Display (CRD) format
FCRDREF ---- First hit in Compact Reaction Display (CRD) format with
             CA reference information (SO, PY).  (Default)
FPATH ------ PATH, plus Reaction Summary for the "long path"
FSPATH ----- SPATH, plus Reaction Summary for the "short path"
HIT -------- Reaction Map, Reaction Diagram, and Reaction
             Summary for all hit reactions and fields containing
             hit terms
OCC -------- All hit fields and the number of occurrences of the
             hit terms in each field.  Includes total number of
             HIT, PATH, SPATH reactions. Labels reactions that have
             incomplete verifications.
PATH ------- Reaction Map and Reaction Diagram for the "long
             path".  Displays all hit reactions, except those
             whose steps are totally included within another hit
             reaction which is displayed
RX --------- Hit Reactions (Map, Diagram, Summary for all hit reactions)
RXG -------- Hit Reaction Graphics (Map and Diagram for all hit reactions)
RXL -------- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)
RXS -------- Hit Reaction Summariers (Map and Summary for all hit reactions)
SPATH ------ Reaction Map and Reaction Diagram for the "short
             path".  Displays all single step reactions which
             contain a hit substance.  Also displays those
             multistep reactions that have a hit substance in both
             the first and last steps of the reaction, except for
             those hit reactions whose steps are totally included
             within another hit reaction which is displayed
```

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS

at an arrow prompt (=>). Examples of combinations include: D TI; D BIB RX; D TI, AU, FCRD. The information is displayed in the same order as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH, FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may be used with the DISPLAY command to display the record for a specified Accession Number.

ENTER DISPLAY FORMAT (FCRDREF):end

=> d his

(FILE 'HOME' ENTERED AT 18:44:55 ON 20 JUN 2004)

FILE 'REGISTRY' ENTERED AT 18:45:39 ON 20 JUN 2004
L1 STRUCTURE UPLOADED

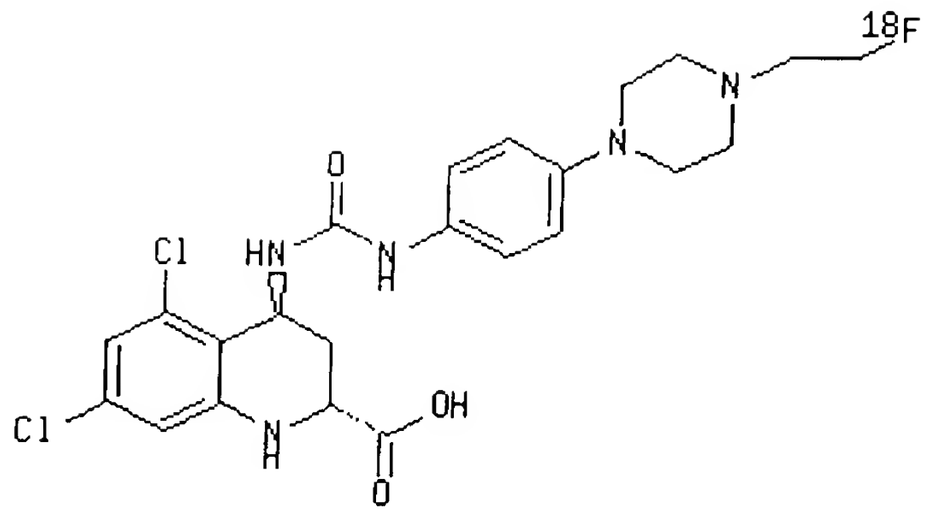
FILE 'CASREACT' ENTERED AT 18:49:39 ON 20 JUN 2004
L2 STRUCTURE UPLOADED
L3 1 S L2
L4 14 S L2 FULL

=> d 14, ibib abs crd, 1-14

L4 ANSWER 1 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

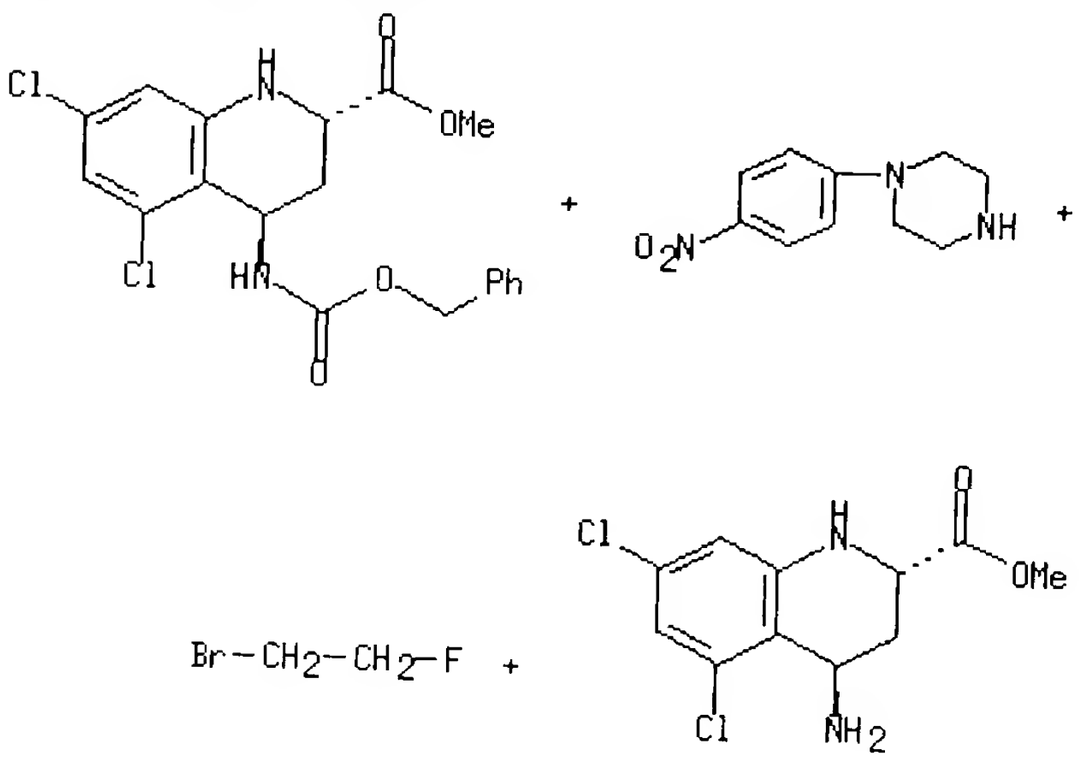
ACCESSION NUMBER: 140:16701 CASREACT
TITLE: Synthesis and evaluation of 5,7-dichloro-4-(3-{4-[4-(2-[18F]fluoroethyl)piperazin-1-yl]phenyl}ureido)-1,2,3,4-tetrahydroquinoline-2-carboxylic acid as a potential NMDA ligand to study glutamatergic neurotransmission in vivo
AUTHOR(S): Piel, Markus; Schirrmacher, Ralf; Hoehnemann, Sabine; Hamkens, Wilhelm; Kohl, Beate; Jansen, Michaela; Schmitt, Ullrich; Lueddens, Hartmut; Dannhardt, Gerd; Roesch, Frank
CORPORATE SOURCE: Institute of Nuclear Chemistry, Mainz, D-55128, Germany
SOURCE: Journal of Labelled Compounds & Radiopharmaceuticals (2003), 46(7), 645-659
CODEN: JLCRD4; ISSN: 0362-4803
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

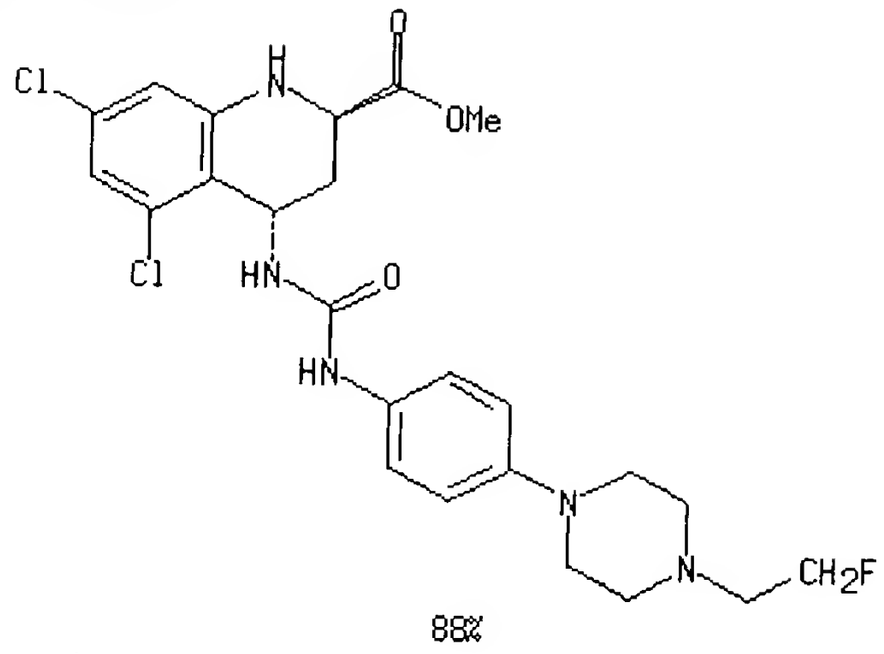
AB The neurotransmitter glutamate is thought to be crucially involved in a huge no. of neurol. and psychiatric disorders, such as Morbus Parkinson, Alzheimer's disease and schizophrenia. Aiming at an improved diagnostic tool for PET a new [18F]fluorine labeled NMDA receptor ligand was developed that may potentially allow the in vivo visualization of glutamatergic neurotransmission. The 19F-analog trans-5,7-dichloro-4-(3-{4-[4-(2-fluoroethyl)piperazin-1-yl]phenyl}ureido)-1,2,3,4-tetrahydroquinoline-2-carboxylic acid was synthesized to det. the binding affinity, lipophilicity and biodistribution of the ligand. This substance exhibits a Ki of 12 nM for the glycine binding site using [3H]MDL-105,519 assays on pig cortical membranes. A log D of 1.3 was detd. for this compd. according to the OECD guidelines employing the HPLC method. Radiosynthesis of this ligand was achieved by labeling the precursor trans-5,7-dichloro-4-[3-(4-piperazin-1-ylphenyl)ureido]-1,2,3,4-tetrahydroquinoline-2-carboxylic acid Me ester with 2-[18F]fluoroethyl tosylate and subsequent cleaving of the Me ester moiety, resulting in an overall decay-cor. yield of 35% of the final product (I). The biodistribution kinetics of this compd. were detd. with Sprague Dawley rats ex vivo for brain, liver, kidney, and bone. The ligand showed a max. brain uptake 30 min p.i. of about 0.1% ID/g.

RX(57) OF 114 - 4 STEPS



HCl

RX(57) OF 114 - 4 STEPS



88%

NOTE: HCl gas used

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 139:301299 CASREACT

TITLE: Structure-Activity Relationships of the p38α MAP Kinase Inhibitor 1-(5-tert-Butyl-2-p-tolyl-2H-pyrazol-3-yl)-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]urea (BIRB 796)

AUTHOR(S): Regan, John; Capolino, Alison; Cirillo, Pier F.; Gilmore, Thomas; Graham, Anne G.; Hickey, Eugene; Kroe, Rachel R.; Madwed, Jeffrey; Moriak, Monica; Nelson, Richard; Pargellis, Christopher A.; Swinamer, Alan; Torcellini, Carol; Tsang, Michele; Moss, Neil

CORPORATE SOURCE: Department of Medicinal Chemistry, Boehringer Ingelheim Pharmaceuticals Research and Development Center, Ridgefield, CT, 06877, USA

SOURCE: Journal of Medicinal Chemistry (2003), 46(22), 4676-4686
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We report on the structure-activity relationships (SAR) of 1-(5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl)-3-[4-(2-morpholin-4-yl-ethoxy)naphthalen-1-yl]urea (BIRB 796), an inhibitor of p38α MAP kinase which has advanced into human clin. trials for the treatment of autoimmune diseases. Thermal denaturation was used to establish mol. binding affinities for this class of p38α inhibitors. The tert-Bu group remains a crit. binding element by occupying a lipophilic domain in the kinase which is exposed upon rearrangement of the activation loop. An arom. ring attached to N-2 of the pyrazole nucleus provides important π-CH2 interactions with the kinase. The role of groups attached through an ethoxy group to the 4-position of the naphthalene and directed into the ATP-binding domain is elucidated. Pharmacophores with good hydrogen bonding potential, such as morpholine, pyridine, and imidazole, shift the melting temp. of p38α by 16-17° translating into Kd values of 50-100 pM. Finally, we describe several compds. that potently inhibit TNF-α prodn. when dosed orally in mice.

RX(36) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(37) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(62) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(63) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(64) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(66) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(76) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(89) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(90) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(91) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(93) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(94) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(95) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(100) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(101) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(102) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(111) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(118) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(119) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(120) OF 120 - REACTION DIAGRAM NOT AVAILABLE

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 138:353987 CASREACT
TITLE: Synthesis of imidazolecarboxylates as intermediates
INVENTOR(S): Helal, Christopher J.
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 31 pp., Cont.-in-part of U.S. Ser. No. 919,630.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2003083352	A1	20030501	US 2002-205091	20020725
US 2002119963	A1	20020829	US 2001-919630	20010731
PRIORITY APPLN. INFO.:			US 2000-221724P	20000731
			US 2000-228394P	20000828
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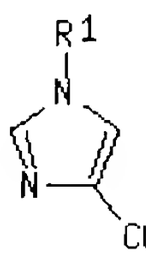
			US 2001-919630	20010731

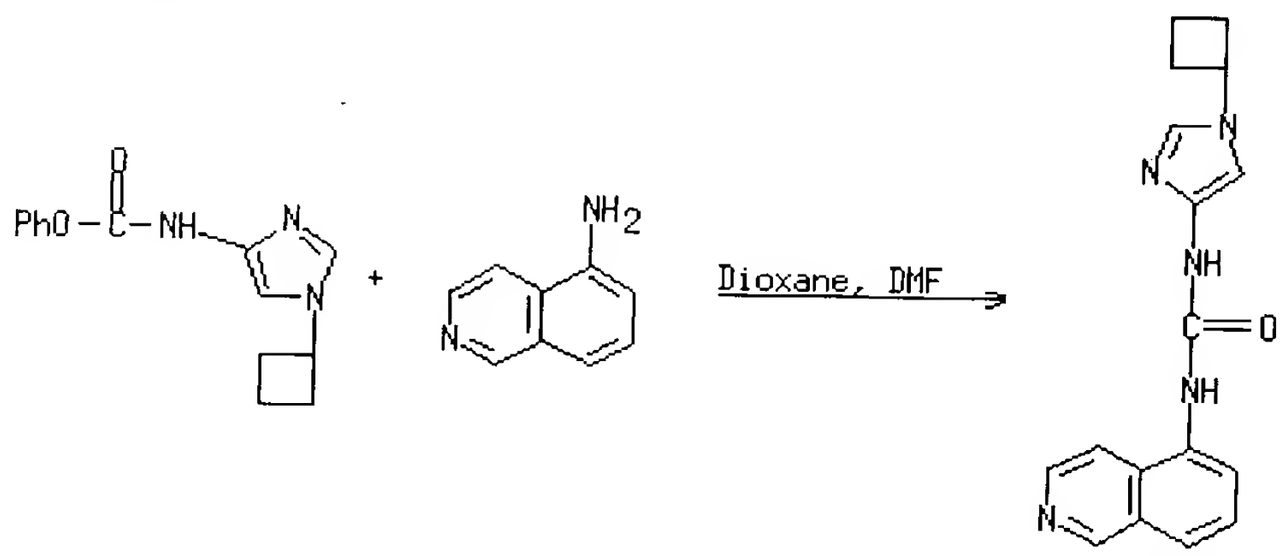
OTHER SOURCE(S): MARPAT 138:353987
GI



I

AB Imidazolecarboxylates I [R1, R2 = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, heterocyclic, bicyclic, heterobicyclic, aryl, hetroaryl] were prepd. by cyclizing Me2NCH:C(CN)CO2R2 with R1NH2 in a solvent, such as BuOH, PrOH, Me2CHOH, or EtOH. I are useful as intermediates for synthesizing compds. having pharmacol. activity inhibiting cdk5, cdk2, and GSK-3. Thus, 1,4-dinitroimidazole was treated with cyclobutylamine to give 1-cyclobutyl-4-nitro-1H-imidazole which was hydrogenated and treated with 6-quinolinylacetic acid to give N-(1-cyclobutyl-1H-imidazol-4-yl)-2-quinolin-6-ylacetamide.

RX(7) OF 204



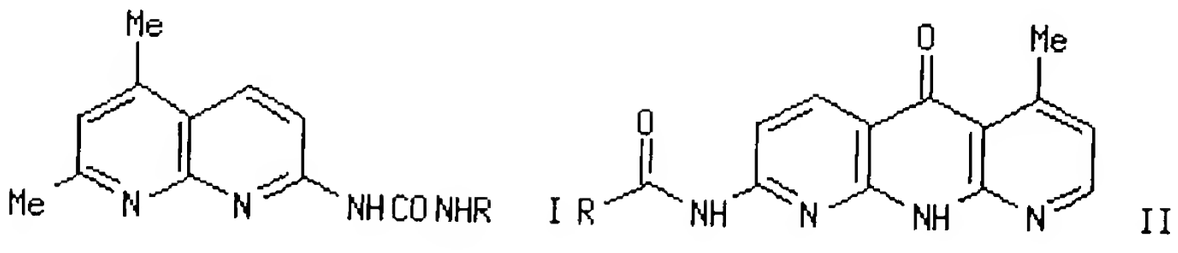
52%

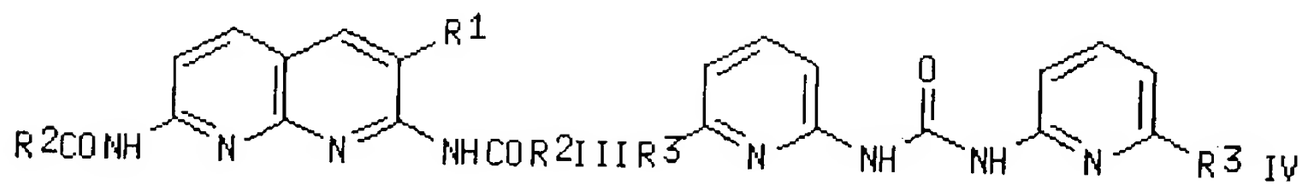
L4 ANSWER 4 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 138:254777 CASREACT
TITLE: Four hydrogen bonds - DDAA, DADA, DAAD and ADDA hydrogen bond motifs
AUTHOR(S): Luning, Ulrich; Kuhl, Christine; Uphoff, Andreas
CORPORATE SOURCE: Olshausenstr. 40, Institut fur Organische Chemie der Universitat Kiel, Olshausenstr. 40, Kiel, 24098, Germany
SOURCE: European Journal of Organic Chemistry (2002), (23),

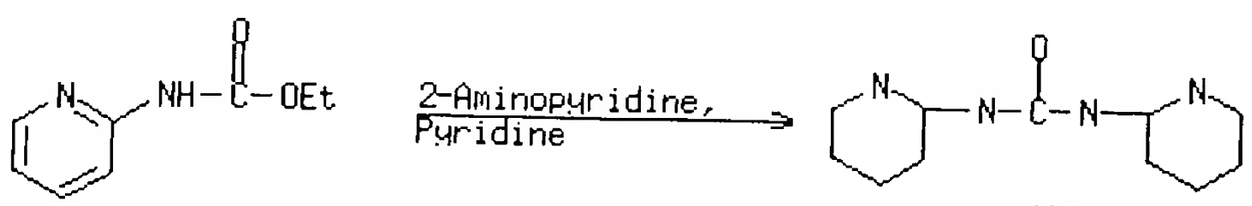
4063-4070
CODEN: EJOCFK; ISSN: 1434-193X
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
GI





AB Receptor mols. contg. four hydrogen-bond acceptor or donor sites based on aminopyridines, aminonaphthyridines and urea subunits have been synthesized and their assocn. has been investigated. DDAA (I; R= t-Bu, Bu, cyclohexyl) and DADA (II; R=Me, Bu) arrays may form homodimers, while DAAD [III; R1,R2 given:CONH2, t-Bu; CN,t-Bu;CN,Bu;CONH(CH2)CH(NHBoc)CO2Me (IV)] with ADDA (V; R3= H,Me) may form heterodimers. While most parent heterocycles were only slightly sol. in std. org. solvents, substitution was able to enhance the soly. in most cases. The naphthyridine IV, bearing a substituent derived from lysine, possesses potential anchor groups for a covalent connection. Binding studies were carried out in chloroform and monitored by 1H NMR, and the binding consts. Kass for the heterodimers DAAD·ADDA were compared to the binding of smaller (ADD) or mismatching (DADD,) counterparts, showing that the matching heterodimer is formed with a selectivity of > 50.

RX(15) OF 29



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 138:24709 CASREACT
TITLE: Preparation of pyrazole compds. and bis pyrazole-1H-pyrazole intermediates as antiinflammatory agents

INVENTOR(S): Kapadia, Suresh R.; Song, Jinhua J.; Yee, Nathan K.
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA
SOURCE: U.S., 37 pp., Cont.-in-part of U.S. 6,372,773.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE
US 6492529	B1	20021210
US 6319921	B1	20011120
US 6333325	B1	20011225
US 6329415	B1	20011211
US 2002065285	A1	20020530
US 6506748	B2	20030114
US 6372773	B1	20020416

APPLICATION NO.	DATE
US 2002-67492	20020205
US 2000-484638	20000118
US 2001-871559	20010531
US 2001-891579	20010626
US 2001-891820	20010626

PRIORITY APPLN. INFO.:

US 2001-920899	20010802
US 2000-484638	20000118
US 2001-920899	20010802
US 1999-116400P	19990119
US 2001-891579	20010626

OTHER SOURCE(S): MARPAT 138:24709
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Pyrazole compds., e.g. I, as well as bis pyrazole-1H-pyrazole intermediate compds. e.g. II, were prepd. The compds. are useful in pharmaceutic compns. for treating diseases or pathol. conditions involving inflammation such as chronic inflammatory diseases. All prepd. compds. had IC50 < 10 mM for inhibition of TNF.alpha. in lipopolysaccharide stimulated THP cells.

RX(74) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(79) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(82) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(93) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(95) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(96) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(97) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(98) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(105) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(134) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(136) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(141) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(143) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(145) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(147) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(148) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(164) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(166) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(167) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(168) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(169) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(170) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(175) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(176) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(177) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(178) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(179) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(180) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(181) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(190) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(191) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(192) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(194) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(245) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(246) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(247) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(251) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(252) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(253) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(254) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(262) OF 282 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

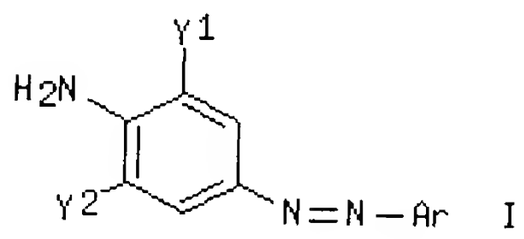
ACCESSION NUMBER: 137:216933 CASREACT
TITLE: Process for preparing 1,4-phenylenediamine derivatives

as intermediates for ACAT inhibitors

INVENTOR(S): Hasegawa, Hirohiko; Muraoka, Masami; Sasaki, Mikio
PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan; Sumitomo Chemical Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

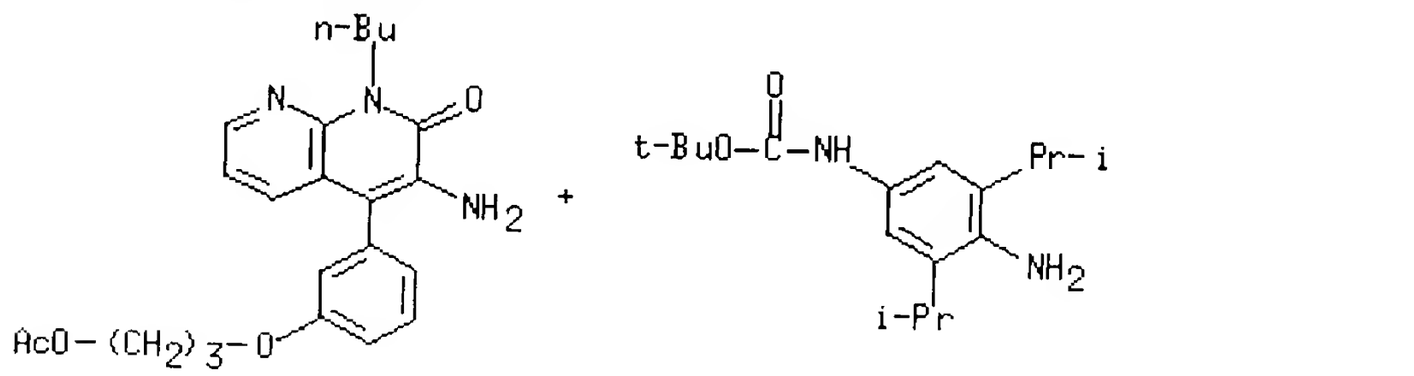
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002249475	A2	20020906	JP 2001-297058	20010927
			JP 2000-391039	20001222

PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 137:216933
GI



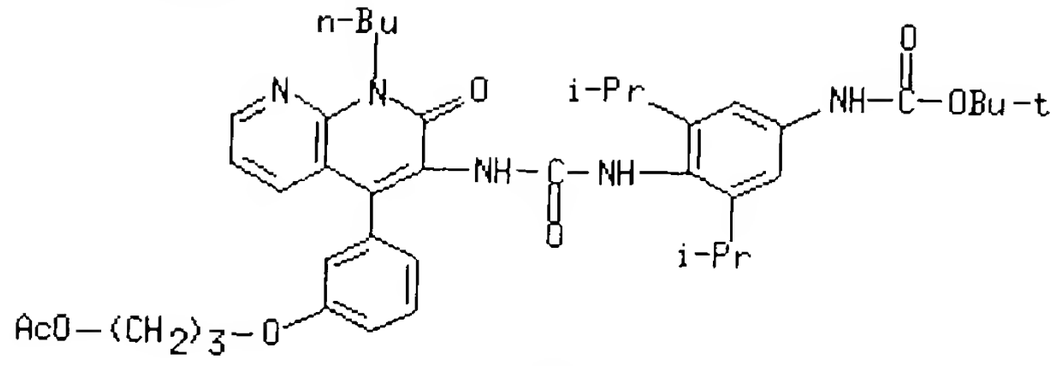
AB The title compds. I [Ar = (un)substituted arom. moiety; Y1, Y2 = H, (un)substituted alkyl, etc.], useful as intermediates for cholesterol acyltransferase (ACAT) inhibitors, are prepd. by reaction of aniline derivs. with benzenediazonium halides. Thus, treatment of aniline with HCl and sodium nitrite in water, followed by reaction with 2,6-diisopropylaniline, gave 2,6-diisopropyl-4-(phenylazo)aniline (II). Reaction of II with 1-butyl-3-(phenoxycarbonylamino)-4-[3-[3-(benzyloxy)propoxy]phenyl]-1,2-dihydro-2-oxo-1,8-naphthyridine, followed by redn. of the product, gave N-[4-[3-(3-hydroxypropoxy)phenyl]-1-butyl-2-oxo-1,2-dihydro-1,8-naphthyridin-3-yl]-N'-(2,6-diisopropyl-4-aminophenyl)urea.

RX(15) OF 28 - 2 STEPS



1. PhOCOCl, PhMe, THF
2.1. 4-DMAP, DMF
2.2. t-BuOMe, NH4Cl, Water

RX(15) OF 28 - 2 STEPS



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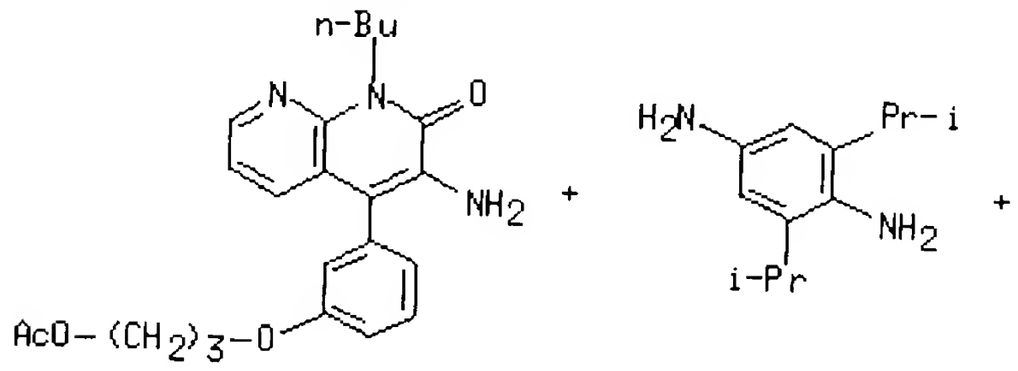
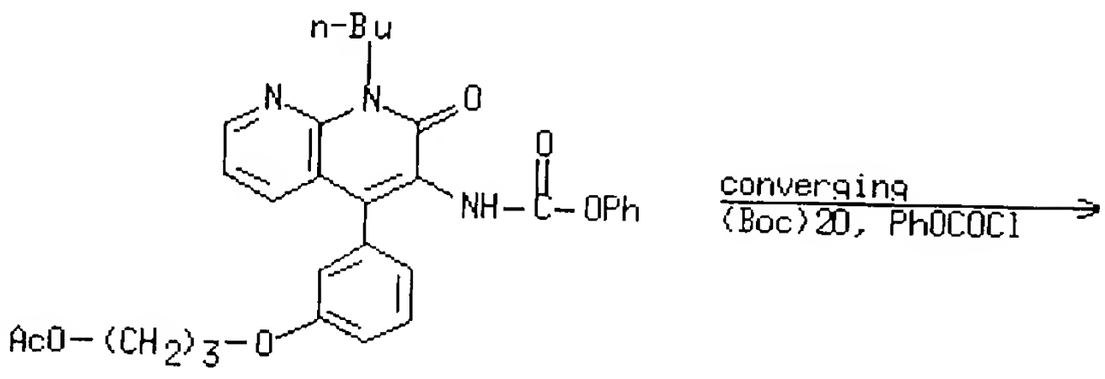
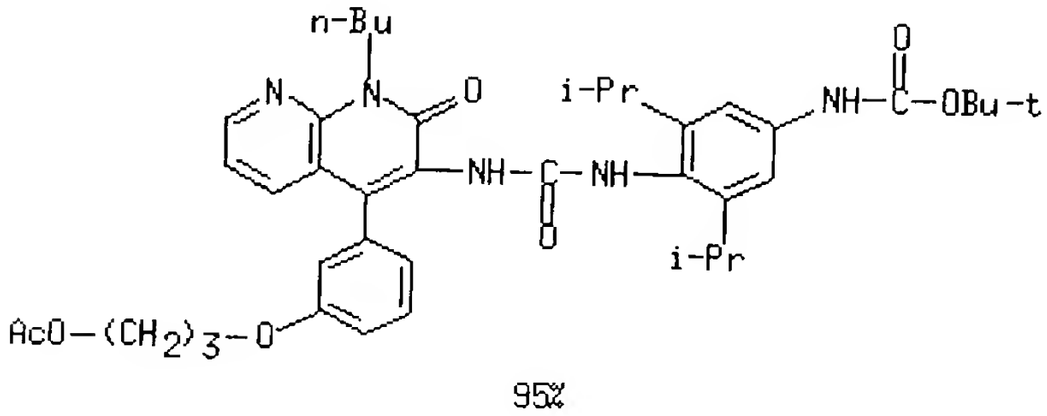
RX(22) OF 28 - 3 STEPS





converging
(Boc)2O, PhOCOCl

RX(22) OF 28 - 3 STEPS



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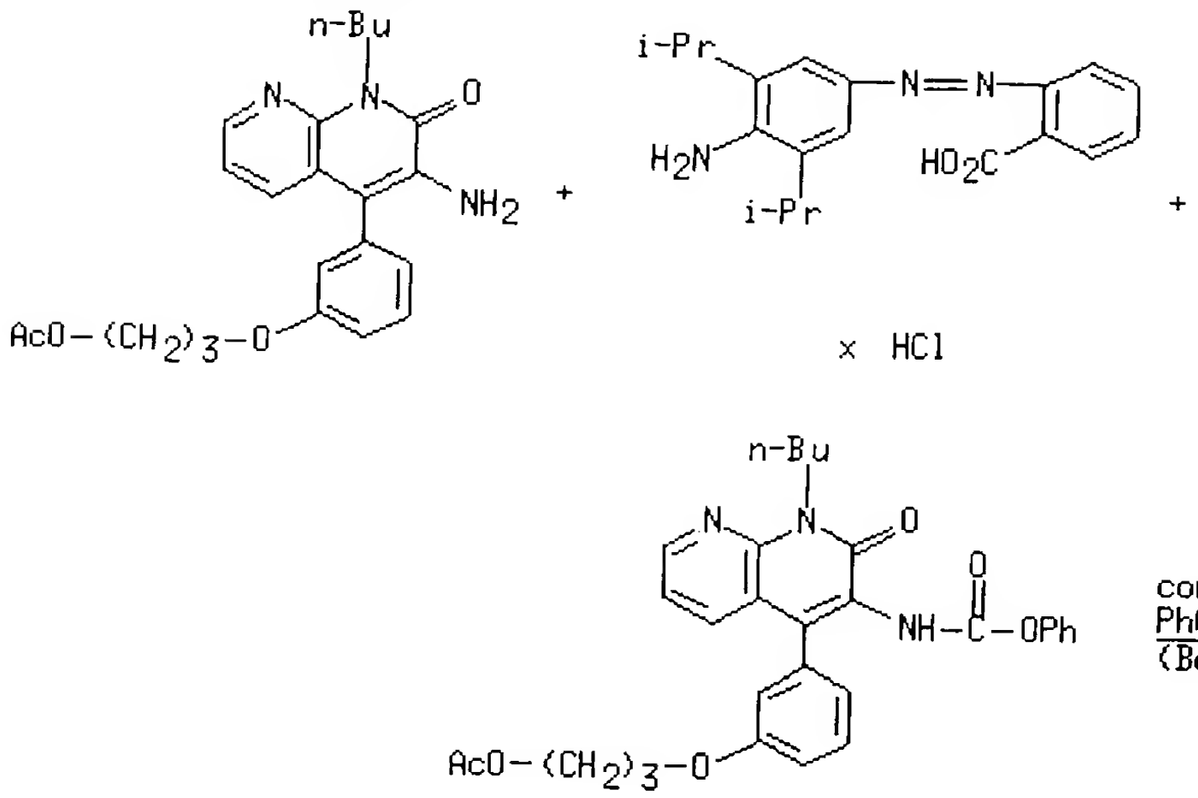
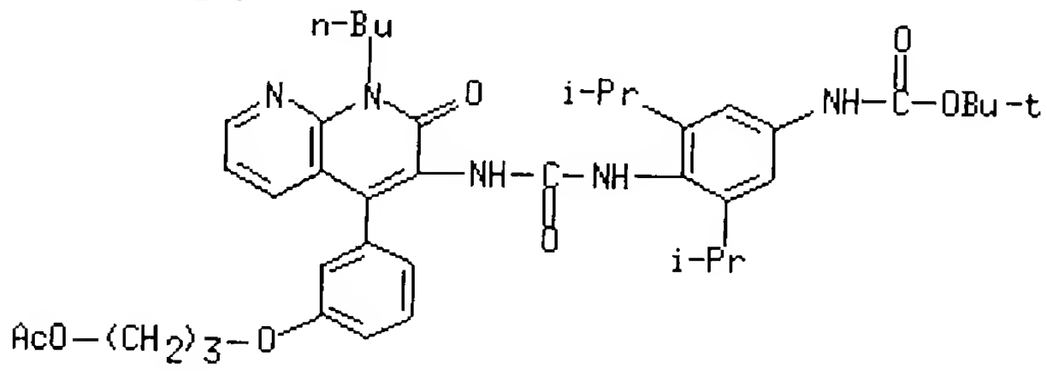
RX(23) OF 28 - 4 STEPS



RX(23) OF 28 - 4 STEPS



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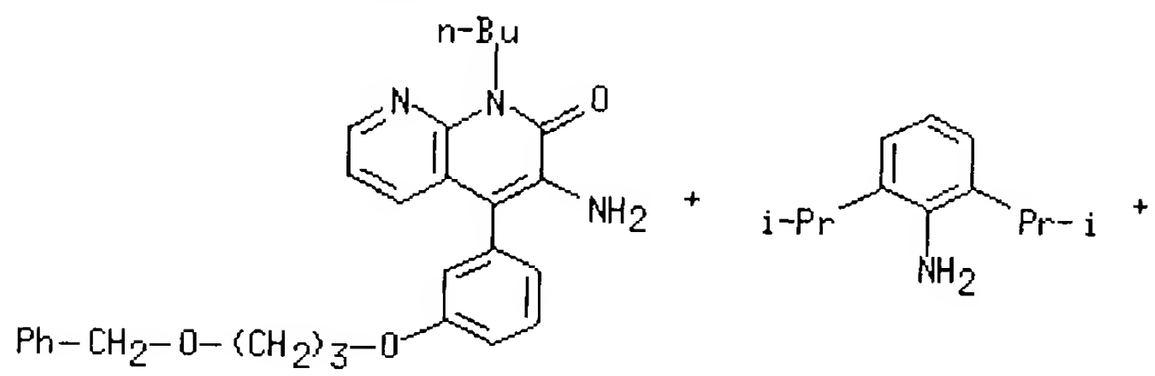
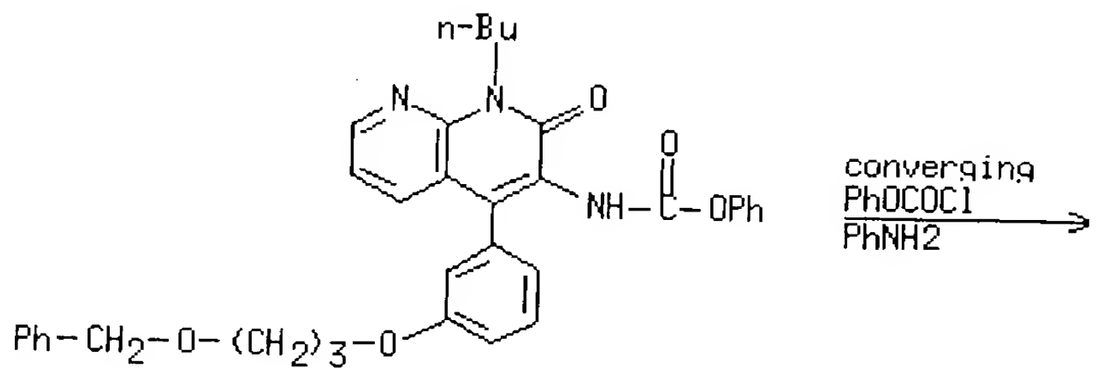
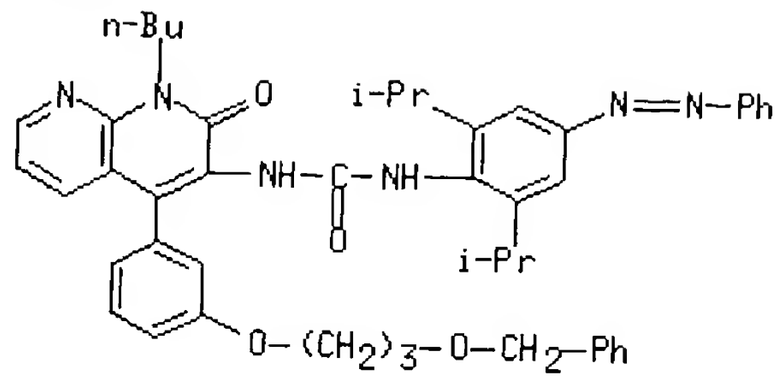
RX(25) OF 28 - 3 STEPS

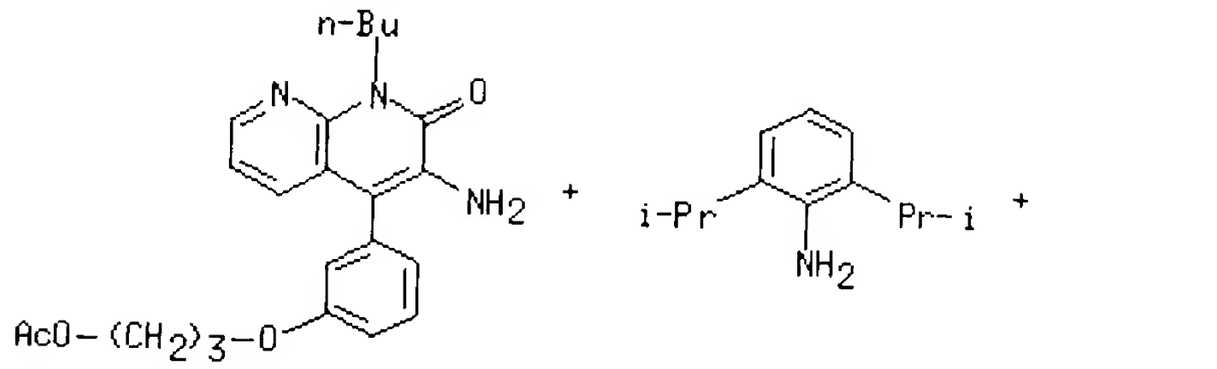


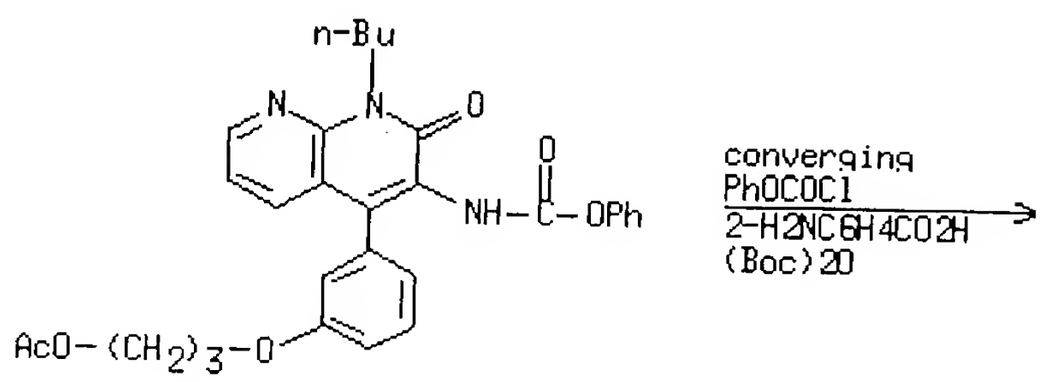


RX(25) OF 28 - 3 STEPS



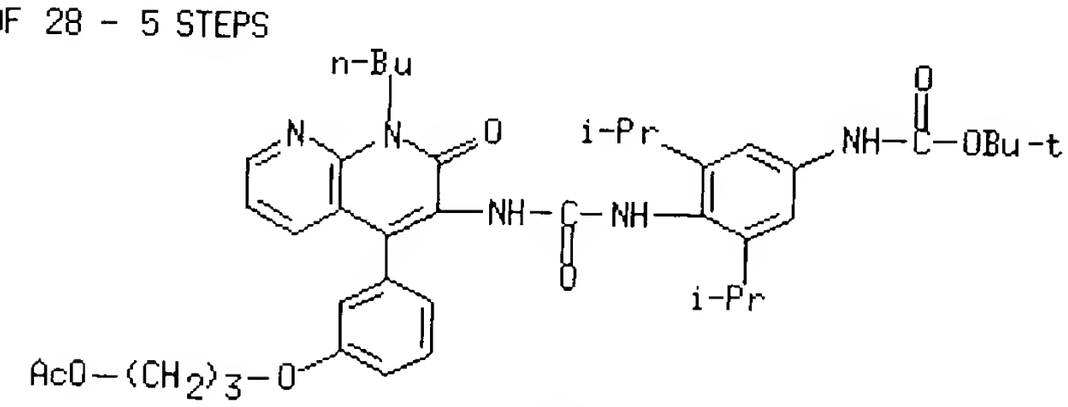
RX(27) OF 28 - 5 STEPS





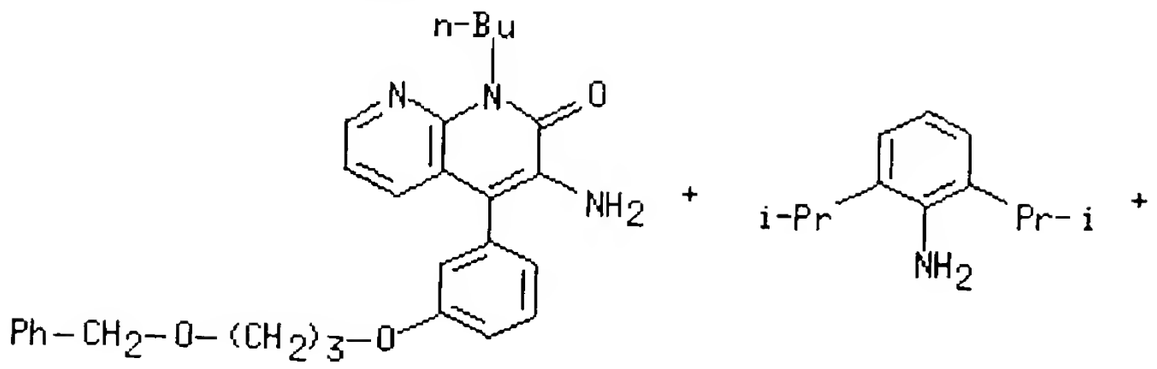
converging
PhOCOCl
2-H2NC6H4CO2H
(Boc)2O

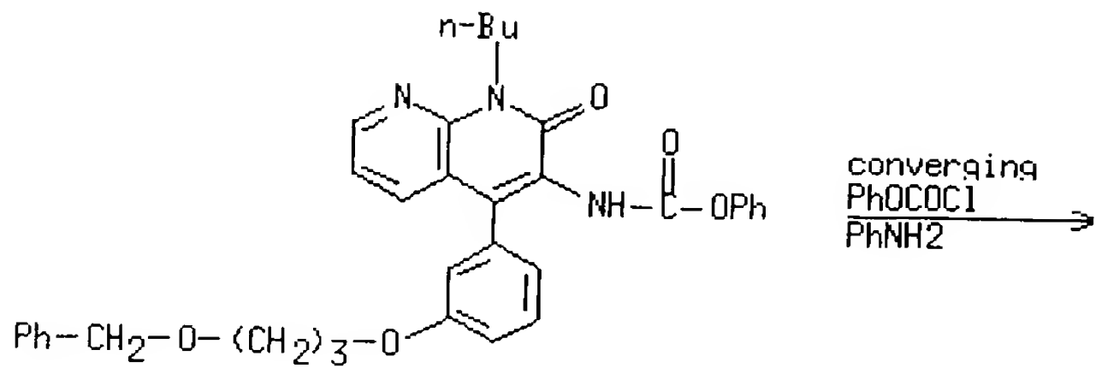
RX(27) OF 28 - 5 STEPS



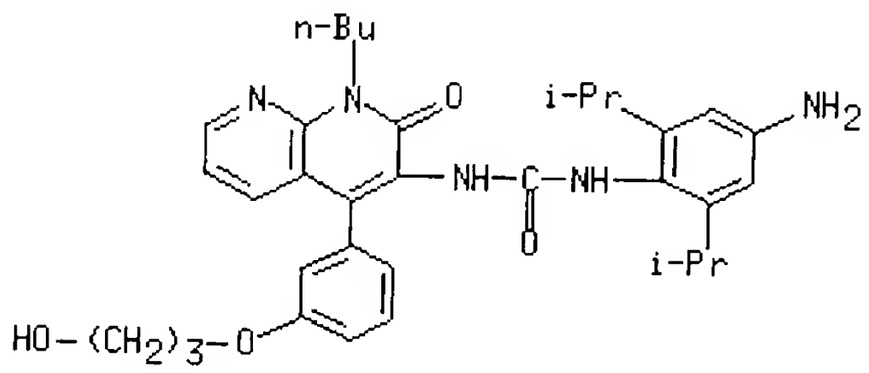
95%

RX(28) OF 28 - 4 STEPS





RX(28) OF 28 - 4 STEPS



L4 ANSWER 7 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

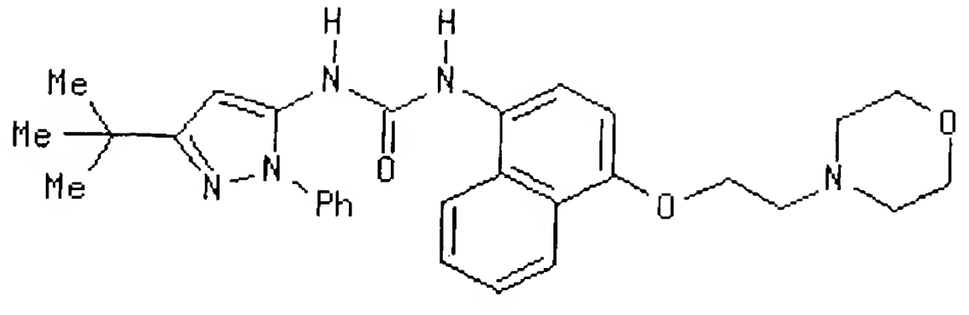
ACCESSION NUMBER: 137:185488 CASREACT
TITLE: Preparation of N-aryl-N'-azolylureas
INVENTOR(S): Tan, Zhulin; Song, Jinhua J.
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002066442	A1	20020829	WO 2002-US2982	20020101
W: CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1362037	A1	20031119	EP 2002-707665	20020101
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2002123631	A1	20020905	US 2002-74895	20020212

PRIORITY APPLN. INFO.: US 2001-268841P 20010215
WO 2002-US2982 20020101

OTHER SOURCE(S): MARPAT 137:185488

GI



I

AB Title compds. were prepd. Thus, 4-[2-(4-morpholinyl)ethoxy]-1-naphthaleneamine was N-acylated by ClCO2CH2CCl3 and the product amidated by 5-(1,1,-dimethylethyl)-1H-pyrazole-3-amine to give, after N-arylation, title compd. I.

RX(4) OF 9 - REACTION DIAGRAM NOT AVAILABLE

RX(6) OF 9 - REACTION DIAGRAM NOT AVAILABLE

RX(7) OF 9 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 137:119059 CASREACT
TITLE: Pyrazole Urea-Based Inhibitors of p38 MAP Kinase: From Lead Compound to Clinical Candidate
AUTHOR(S): Regan, John; Breitfelder, Steffen; Cirillo, Pier; Gilmore, Thomas; Graham, Anne G.; Hickey, Eugene; Klaus, Bernhard; Madwed, Jeffrey; Moriak, Monica; Moss, Neil; Pargellis, Chris; Pav, Sue; Proto, Alfred; Swinamer, Alan; Tong, Liang; Torcellini, Carol
CORPORATE SOURCE: Research and Development Center, Department of Medicinal Chemistry, Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT, 06877, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(14), 2994-3008
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We report on a series of N-pyrazole, N'-aryl ureas and their mode of binding to p38 mitogen activated protein kinase. Importantly, a key binding domain that is distinct from the ATP (ATP) binding site is exposed when the conserved activation loop, consisting in part of Asp168-Phe169-Gly170, adopts a conformation permitting lipophilic and hydrogen bonding interactions between this class of inhibitors and the protein. We describe the correlation of the structure-activity relationships and crystallog. structures of these inhibitors with p38. In addn., we incorporated another binding pharmacophore that forms a hydrogen bond at the ATP binding site. This modification affords significant improvements in binding, cellular, and in vivo potencies resulting in the selection of Compd. 45 (BIRB 796) as a clin. candidate for the treatment of inflammatory diseases.

RX(67) OF 99 - REACTION DIAGRAM NOT AVAILABLE

RX(86) OF 99 - REACTION DIAGRAM NOT AVAILABLE

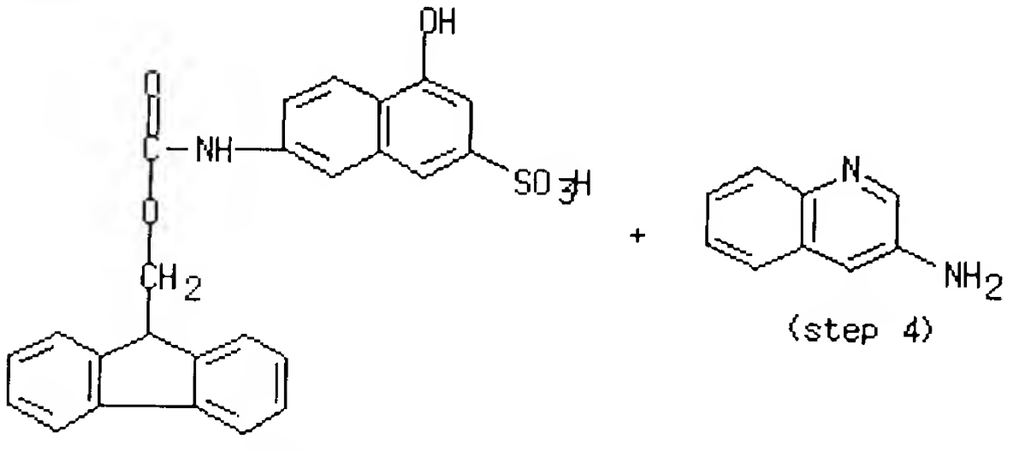
RX(88) OF 99 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 129:27804 CASREACT
TITLE: Solid support-bound synthesis of polyfunctional unsymmetrical ureas
AUTHOR(S): Maurer, Karl W.; Kenyon, George L.
CORPORATE SOURCE: Department of Pharmaceutical Chemistry, University of California, San Francisco, CA, 94143-0446, USA
SOURCE: Bioorganic Chemistry (1997), 25(5/6), 277-281
CODEN: BOCMBM; ISSN: 0045-2068
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Solid support-bound chem. has been used to gain access to several polyfunctional ureas which could not be easily produced via traditional soln. phase approaches.

RX(6) OF 7



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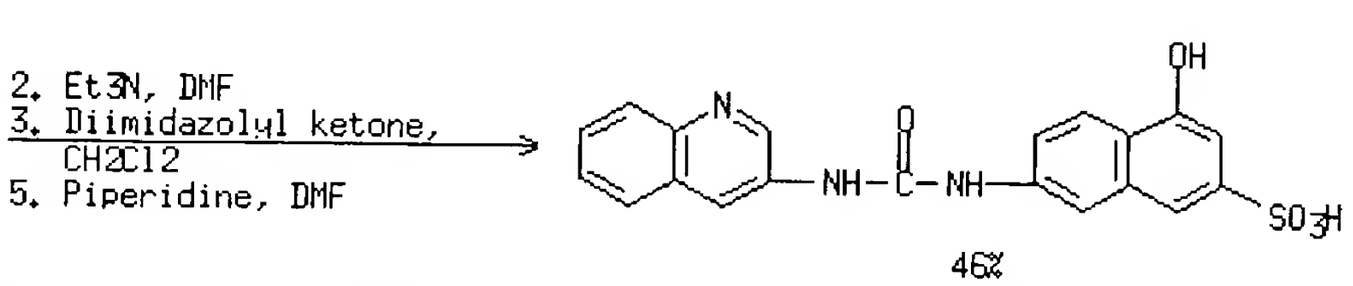


NOTE: first stage is attachment to carboxypolystyrene resin
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

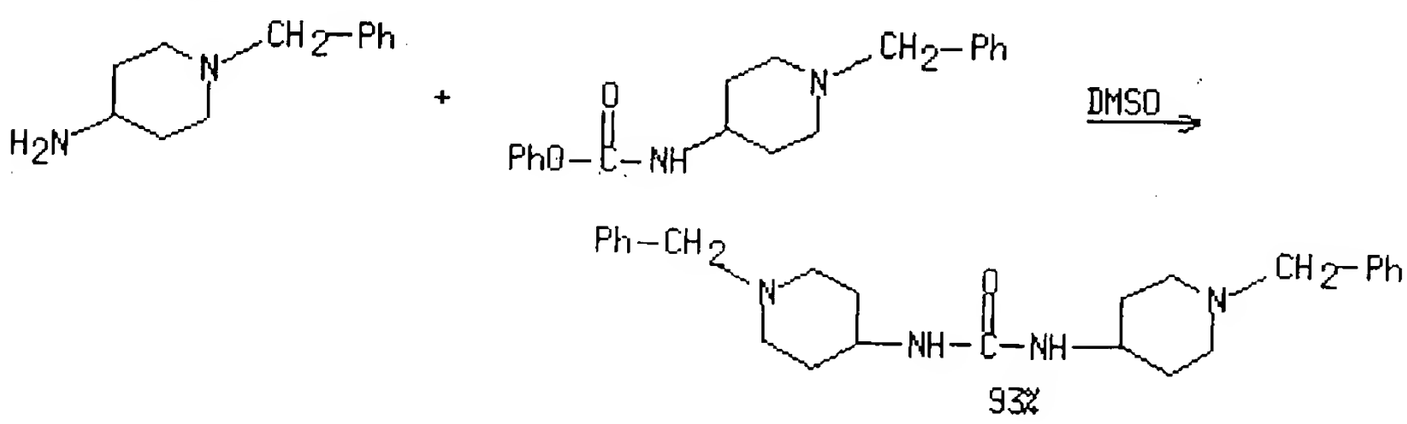
Full Text | Citing References

ACCESSION NUMBER: 128:34510 CASREACT
TITLE: A practical synthesis of ureas from phenyl carbamates
AUTHOR(S): Thavonekham, Bounkham
CORPORATE SOURCE: Bio-Mega Research Division, Boehringer Ingelheim Ltd., Laval, QC, H7S 2G5, Can.

SOURCE: Synthesis (1997), (10), 1189-1194
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Thieme
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Using DMSO as solvent, a mild and efficient procedure for the synthesis of unsym. N,N'-disubstituted ureas from Ph carbamates is described. The carbamates are treated with a stoichiometric amt. of amine at ambient temp., generating the ureas in high yield and high purity. The reaction is mild, fast, and easily scaled up.

RX(8) OF 13



L4 ANSWER 11 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 127:262982 CASREACT
TITLE: A new type of fluorescence labeling of nucleosides, nucleotides and oligonucleotides
AUTHOR(S): Sigmund, Harald; Maier, Thomas; Pfleiderer, Wolfgang
CORPORATE SOURCE: Fakultat Chemie, Universitat Konstanz, Konstanz, D-78434, Germany
SOURCE: Nucleosides & Nucleotides (1997), 16(5 & 6), 685-696
CODEN: NUNUD5; ISSN: 0732-8311
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluorescein has been coupled to the amino groups of the common nucleosides via a carbamoyl spacer to form a new type of conjugates. The corresponding phosphoramidites have been prepd. with Npe and Npeoc protecting groups for application in oligonucleotide synthesis. Hybridizations have been studied in dependence of the fluorescing label as well as fluorescence quantum yields and fluorescence anisotropy effects.

RX(1) OF 2 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

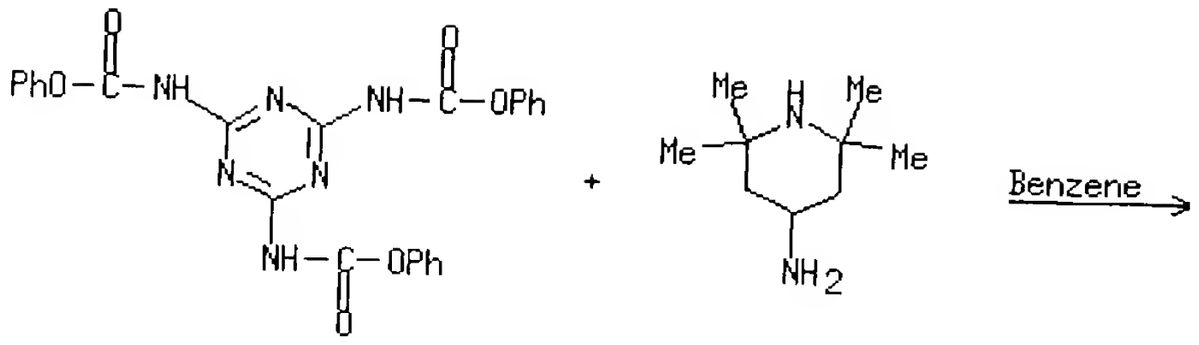
ACCESSION NUMBER: 121:9425 CASREACT
TITLE: Process for preparing amide derivatives from haloaminotriazines and acid halides
INVENTOR(S): Gupta, Ram B.
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: U.S., 22 pp. Cont.-in-part of U.S. Ser. No. 793,077,

abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

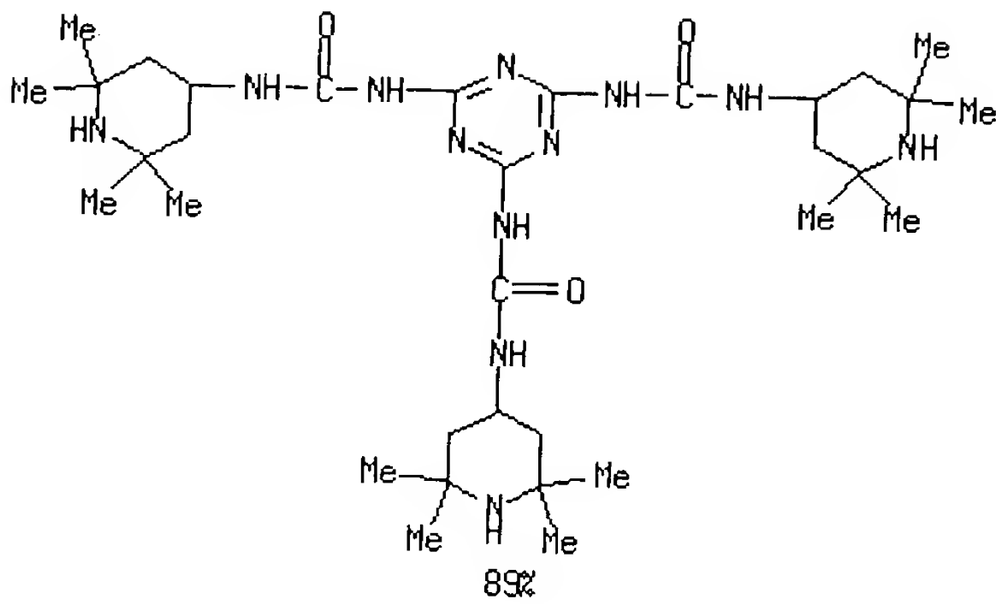
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5288865	A	19940222	US 1992-968871	19921030
CA 2082880	AA	19930516	CA 1992-2082880	19921113
NO 9204394	A	19930518	NO 1992-4394	19921113
AU 9228361	A1	19930520	AU 1992-28361	19921113
AU 655688	B2	19950105		
EP 565774	A2	19931020	EP 1992-119485	19921113
EP 565774	A3	19940817		
EP 565774	B1	20010328		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
EP 930303	A2	19990721	EP 1999-101493	19921113
EP 930303	A3	19990728		
EP 930303	B1	20040204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 933371	A1	19990804	EP 1999-101466	19921113
EP 933371	B1	20030409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 933369	A1	19990804	EP 1999-101495	19921113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
EP 933370	A1	19990804	EP 1999-101496	19921113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 200078	E	20010415	AT 1992-119485	19921113
AT 236889	E	20030415	AT 1999-101466	19921113
AT 258925	E	20040215	AT 1999-101493	19921113
BR 9204416	A	19930720	BR 1992-4416	19921116
JP 05239038	A2	19930917	JP 1992-330050	19921116
JP 3435654	B2	20030811		
US 5405959	A	19950411	US 1993-150679	19931110
US 5571915	A	19961105	US 1995-398256	19950303
US 5496944	A	19960305	US 1995-469720	19950606
US 6107369	A	20000822	US 1995-469726	19950606
PRIORITY APPLN. INFO.:			US 1991-793077	19911115
			US 1992-968871	19921030
			US 1992-973676	19921109
			EP 1992-119485	19921113
			US 1993-1697	19930107
			US 1993-150679	19931110

AB This invention provides a process for prepg. amide derivs. of acids by the reaction of haloaminotriazines and acid halides. This invention also provides a process for prepg. isocyanates and isocyanate adducts from amide derivs. derived from haloaminotriazines and acid halides such as oxalyl chloride, phosgene and phosgene analogs. Melamine derived acid amides are prepd. by reaction of trichloro and hexachloromelamines with chloroformates and acid chlorides. The byproduct chlorine may be recycled in this process. Amides, carbamates, sulfoamides, phosphoramides, and related amide derivs. may be prepd. by the novel processes of the invention. Thus, reaction of hexachloromelamine with Me chloroformate in the presence of polydimethylaminopyridine at 70° for 6h gave 80% triazine trismethylcarbamate.

RX(5) OF 7



RX(5) OF 7



L4 ANSWER 13 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

ACCESSION NUMBER: 99:38434 CASREACT

TITLE: Triazolo[4',3':4,5][1,3,4]thiadiazolo[2,3-b]quinazolin-6-one

AUTHOR(S): Gakhar, H. K.; Jain, Anju; Gill, J. K.; Gupta, Shashi Bhushan

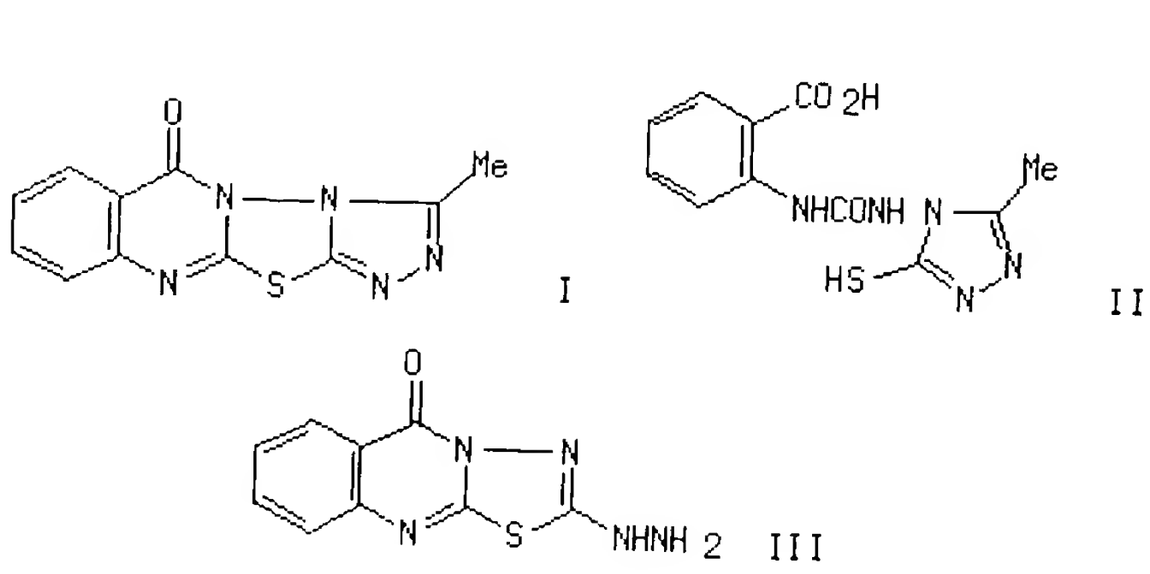
CORPORATE SOURCE: Dep. Chem., Panjab Univ., Chandigarh, 160014, India

SOURCE: Monatshefte fuer Chemie (1983), 114(3), 339-42
CODEN: MOCMB7; ISSN: 0026-9247

DOCUMENT TYPE: Journal

LANGUAGE: English

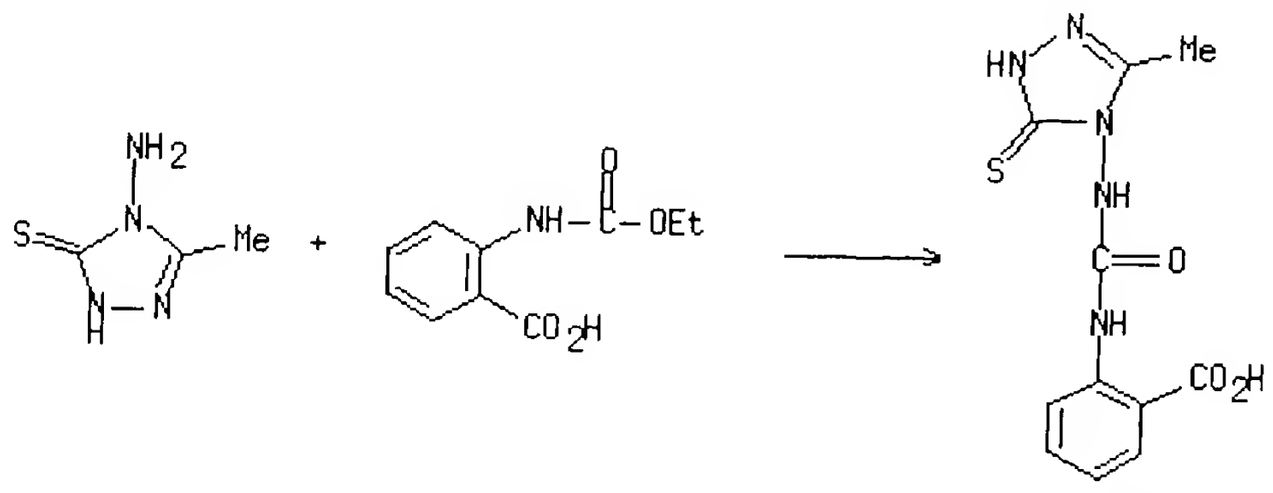
GI



AB The triazolothiadiazoloquinazolinone I was synthesized by the condensation of isatoic anhydride with 4-amino-5-mercapto-3-methyl-1,2,4-triazole and followed by cyclization of the intermediate II with POCl3 and PCl3. Alternatively I could also be synthesized by the condensation of

3-amino-2-mercapto-3H-quinazolin-4-one with N-carbethoxyhydrazine in the presence of HCl and final cyclization of the intermediate III with HOAc.

RX(3) OF 11

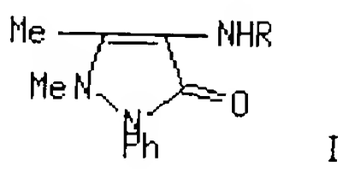


70%

L4 ANSWER 14 OF 14 CASREACT COPYRIGHT 2004 ACS on STN

Full Text | Citing References

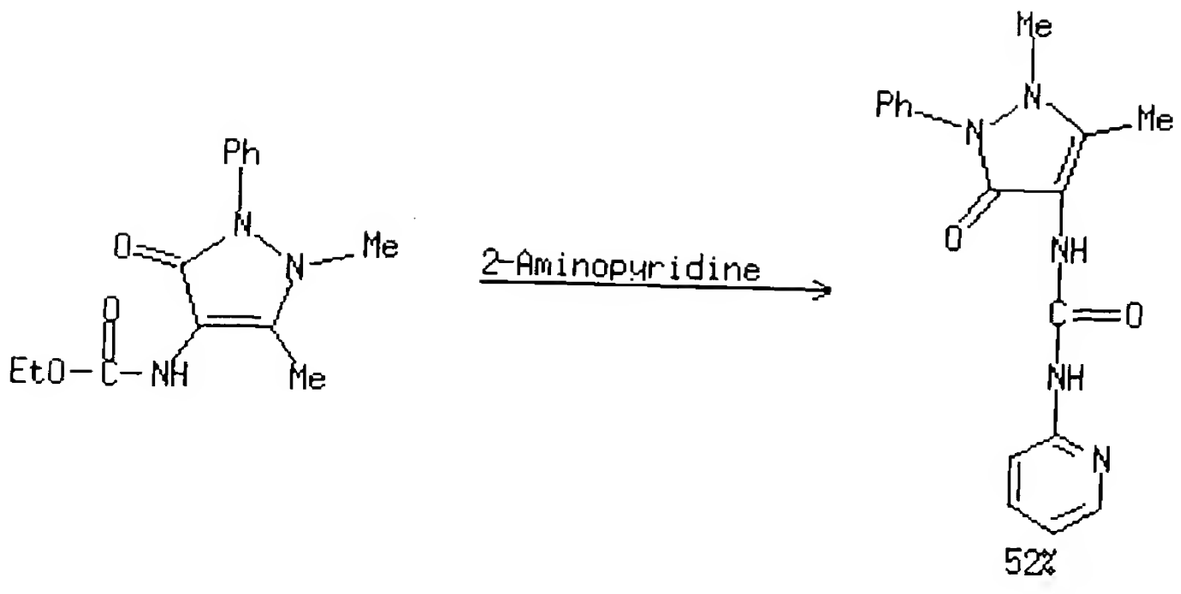
ACCESSION NUMBER: 91:56906 CASREACT
TITLE: Synthesis of some substituted aminophenazones of possible therapeutic interest
AUTHOR(S): Farghaly, A. M.
CORPORATE SOURCE: Fac. Pharm., Univ. Alexandria, Alexandria, Egypt
SOURCE: Pharmazie (1979), 34(2), 70-3
CODEN: PHARAT; ISSN: 0031-7144
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Hydrazones I (R = CH2CONHN:CR1R2; R1 = H, R2 = optionally substituted Ph; R1 = Me, R2 = Me, Ph) were prepd. from I (R = H) via I (R = CH2CO2Et) and I (R = CH2CONHNH2). I (R = CH2CONHNHR3; R3 = Bz, SO2Ph, SO2C6H4Me-4, COCH:CHPh, COCHPhOAc, COCPh2OAc) were also prepd. from I (R = CH2CONHNH2). I (R = COCH2R4; R4 = NEt2, N(CH2CH2OH)2, piperidino, morpholino, 4-(2-hydroxyethyl)piperazino, 4-ethoxycarbonylpiperazino) were prepd. from I (R = H) via I (R = COCH2Cl). I (R = CONHR5; R5 = CMe3, cyclohexyl, Ph, 4-MeC6H4, 4-ClC6H4, CH2Ph, 2-naphthyl, 2-pyridyl) were obtained by aminating I (R = CO2Et), prepd. by treating I (R = H) with ClCO2Et. I [R = CH2CONHNHCOCH:CHPh, CH2CONHNHCOCPh2OAc (II), COCH2N(CH2CH2OH)2] had analgesic activity comparable to that of phenylbutazone and II also had antiinflammatory activity.

RX(25) OF 46



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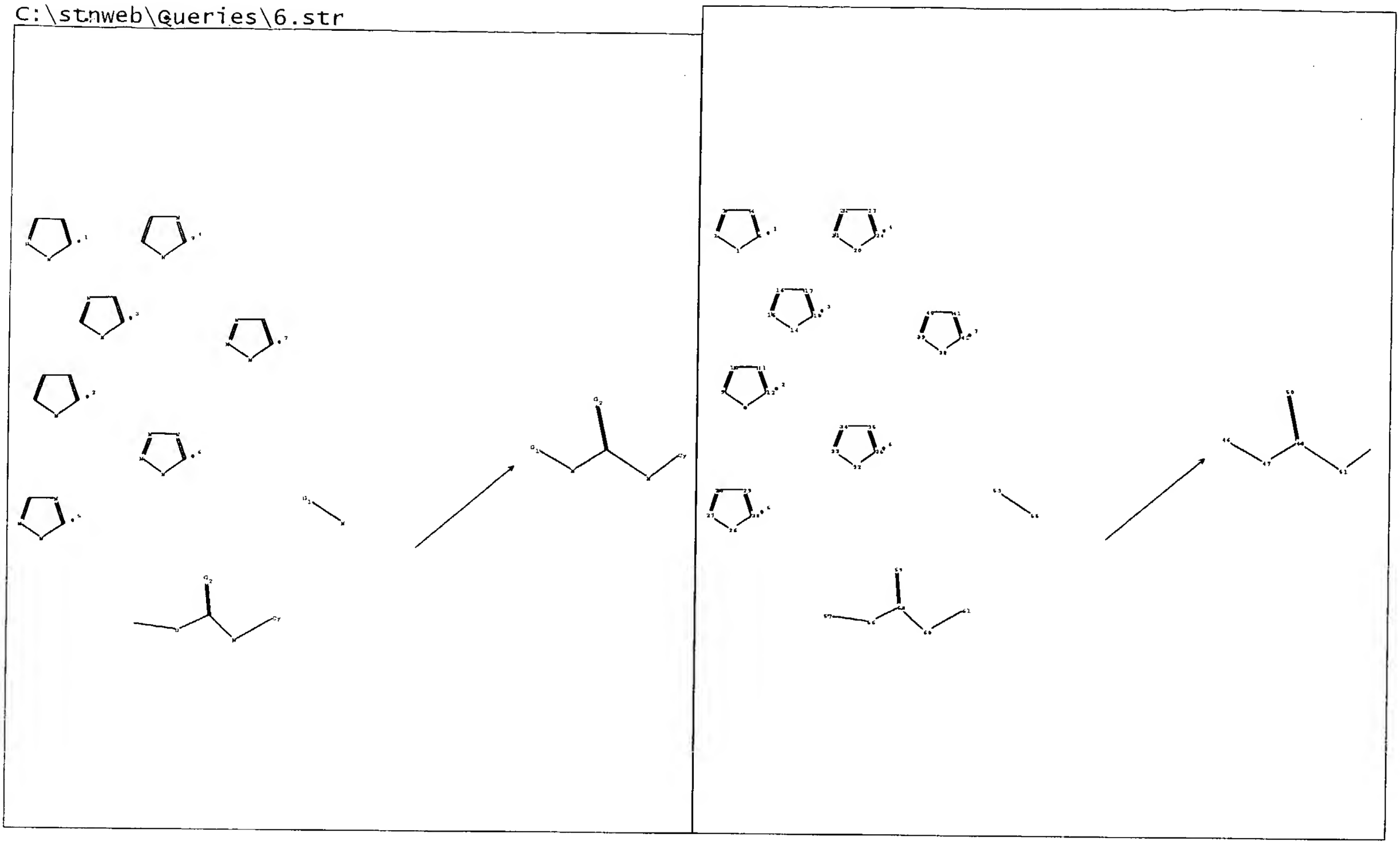
C:\stnweb\queries\6.str



chain nodes :
46 47 48 50 51 52 53 55 56 58 59 60 61
ring nodes :
1 2 3 4 5 8 9 10 11 12 14 15 16 17 18 20 21 22 23 24 26 27 28 29
30 32 33 34 35 36 38 39 40 41 42
ring/chain nodes :
57
chain bonds :
46-47 47-48 48-50 48-51 51-52 53-55 56-57 56-58 58-59 58-60 60-61
ring bonds :
1-2 1-5 2-3 3-4 4-5 8-9 8-12 9-10 10-11 11-12 14-15 14-18 15-16 16-17 17-18
20-21 20-24 21-22 22-23 23-24 26-27 26-30 27-28 28-29 29-30 32-33 32-36 33-34
34-35 35-36 38-39 38-42 39-40 40-41 41-42
exact/norm bonds :
1-2 1-5 2-3 8-9 8-12 14-15 14-18 15-16 16-17 20-21 20-24 22-23 23-24 26-27
26-30 27-28 28-29 29-30 32-33 32-36 33-34 34-35 35-36 38-39 38-42 39-40 40-41
46-47 47-48 48-50 48-51 51-52 53-55 56-57 56-58 58-59 58-60 60-61
exact bonds :
3-4 4-5 9-10 10-11 11-12 17-18 21-22 41-42
isolated ring systems :
containing 1 : 8 : 14 : 20 : 26 : 32 : 38 :

G1:[*1],[*2],[*3],[*4],[*5],[*6],[*7]

G2:O,S

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom
14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom
26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom
38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 46:CLASS 47:CLASS 48:CLASS 50:CLASS
51:CLASS 52:Atom 53:CLASS 55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS 60:CLASS
61:Atom
fragments assigned reactant role:

containing 53
containing 56
fragments assigned product role:
containing 46

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* * * * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1              Web Page URLs for STN Seminar Schedule - N. America
NEWS 2              "Ask CAS" for self-help around the clock
NEWS 3   May 10     PROUSDDR now available on STN
NEWS 4   May 19     PROUSDDR: One FREE connect hour, per account, in both May
                    and June 2004
NEWS 5   May 12     EXTEND option available in structure searching
NEWS 6   May 12     Polymer links for the POLYLINK command completed in REGISTRY
NEWS 7   May 17     FRFULL now available on STN
NEWS 8   May 27     STN User Update to be held June 7 and June 8 at the SLA 2004
                    Conference
NEWS 9   May 27     New UPM (Update Code Maximum) field for more efficient patent
                    SDIs in CAplus
NEWS 10  May 27     CAplus super roles and document types searchable in REGISTRY
NEWS 11  May 27     Explore APOLLIT with free connect time in June 2004

NEWS EXPRESS        MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
                    MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
                    AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
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NEWS INTER          General Internet Information
NEWS LOGIN          Welcome Banner and News Items
NEWS PHONE          Direct Dial and Telecommunication Network Access to STN
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  * * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 19:43:09 ON 20 JUN 2004

=> file casreact
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                        ENTRY      SESSION
FULL ESTIMATED COST                                      0.21         0.21

FILE 'CASREACT' ENTERED AT 19:43:21 ON 20 JUN 2004
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FILE CONTENT:1840 - 20 Jun 2004 VOL 140 ISS 25

**********************************************************
*                                                        *
*      CASREACT now has more than  8 million reactions   *
*                                                        *
**********************************************************
```

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem and some records are produced using some INPI data from the period prior to 1986.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Crossover limits have been increased. See HELP RNCROSSOVER for details.

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

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=>
L1       STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1                STR

=> s l1
SAMPLE SEARCH INITIATED 19:51:21 FILE 'CASREACT'
SCREENING COMPLETE -       2 REACTIONS TO VERIFY FROM       2 DOCUMENTS

100.0% DONE       2 VERIFIED        0 HIT RXNS                          0 DOCS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE   **COMPLETE**
                        BATCH    **COMPLETE**
PROJECTED VERIFICATIONS:          2 TO       124
PROJECTED ANSWERS:                0 TO         0

L2             0 SEA SSS SAM L1 (      0 REACTIONS)

=> s l1 full
THE ESTIMATED SEARCH COST FOR FILE 'CASREACT' IS 102.30 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 19:51:27 FILE 'CASREACT'
SCREENING COMPLETE -     301 REACTIONS TO VERIFY FROM      51 DOCUMENTS

100.0% DONE     301 VERIFIED       89 HIT RXNS                          3 DOCS
SEARCH TIME: 00.00.01

L3             3 SEA SSS FUL L1 (     89 REACTIONS)

=> d l3, ibib abs crd, 1-3


 L3   ANSWER 1 OF 3  CASREACT  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         139:301299  CASREACT
TITLE:                    Structure-Activity Relationships of the p38.alpha. MAP
                          Kinase Inhibitor 1-(5-tert-Butyl-2-p-tolyl-2H-pyrazol-□
                          3-yl)-3-[4-(2-morpholin-4-yl-ethoxy)naph-
                          thalen-1-yl]urea (BIRB 796)
AUTHOR(S):                Regan, John; Capolino, Alison; Cirillo, Pier F.;
                          Gilmore, Thomas; Graham, Anne G.; Hickey, Eugene;
                          Kroe, Rachel R.; Madwed, Jeffrey; Moriak, Monica;
                          Nelson, Richard; Pargellis, Christopher A.; Swinamer,
                          Alan; Torcellini, Carol; Tsang, Michele; Moss, Neil
CORPORATE SOURCE:         Department of Medicinal Chemistry, Boehringer
```

Ingelheim Pharmaceuticals Research and Development Center, Ridgefield, CT, 06877, USA
SOURCE: Journal of Medicinal Chemistry (2003), 46(22), 4676-4686
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report on the structure-activity relationships (SAR) of 1-(5-tert-butyl-2-p-tolyl-2H-pyrazol-3-yl)-3-[4-(2-morpholin-4-yl-□ ethoxy)naphthalen-1-yl]urea (BIRB 796), an inhibitor of p38.alpha. MAP kinase which has advanced into human clin. trials for the treatment of autoimmune diseases. Thermal denaturation was used to establish mol. binding affinities for this class of p38.alpha. inhibitors. The tert-Bu group remains a crit. binding element by occupying a lipophilic domain in the kinase which is exposed upon rearrangement of the activation loop. An arom. ring attached to N-2 of the pyrazole nucleus provides important .pi.-CH2 interactions with the kinase. The role of groups attached through an ethoxy group to the 4-position of the naphthalene and directed into the ATP-binding domain is elucidated. Pharmacophores with good hydrogen bonding potential, such as morpholine, pyridine, and imidazole, shift the melting temp. of p38.alpha. by 16-17.degree. translating into Kd values of 50-100 pM. Finally, we describe several compds. that potently inhibit TNF-.alpha. prodn. when dosed orally in mice.

RX(33) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(34) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(35) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(36) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(37) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(55) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(56) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(57) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(60) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(62) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(63) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(64) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(66) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(76) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(85) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(86) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(87) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(89) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(90) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(91) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(93) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(94) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(95) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(98) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(99) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(100) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(101) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(102) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(111) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(116) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(117) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(118) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(119) OF 120 - REACTION DIAGRAM NOT AVAILABLE

RX(120) OF 120 - REACTION DIAGRAM NOT AVAILABLE

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 3 CASREACT COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 138:24709 CASREACT

TITLE: Preparation of pyrazole compds. and bis pyrazole-1H-pyrazole intermediates as antiinflammatory agents

INVENTOR(S): Kapadia, Suresh R.; Song, Jinhua J.; Yee, Nathan K.

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharmaceuticals, Inc., USA

SOURCE: U.S., 37 pp., Cont.-in-part of U.S. 6,372,773.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6492529	B1	20021210	US 2002-67492	20020205
US 6319921	B1	20011120	US 2000-484638	20000118
US 6333325	B1	20011225	US 2001-871559	20010531
US 6329415	B1	20011211	US 2001-891579	20010626
US 2002065285	A1	20020530	US 2001-891820	20010626
US 6506748	B2	20030114		
US 6372773	B1	20020416	US 2001-920899	20010802
PRIORITY APPLN. INFO.:			US 2000-484638	20000118

US 2001-920899 20010802
US 1999-116400P 19990119
US 2001-891579 20010626

OTHER SOURCE(S): MARPAT 138:24709
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

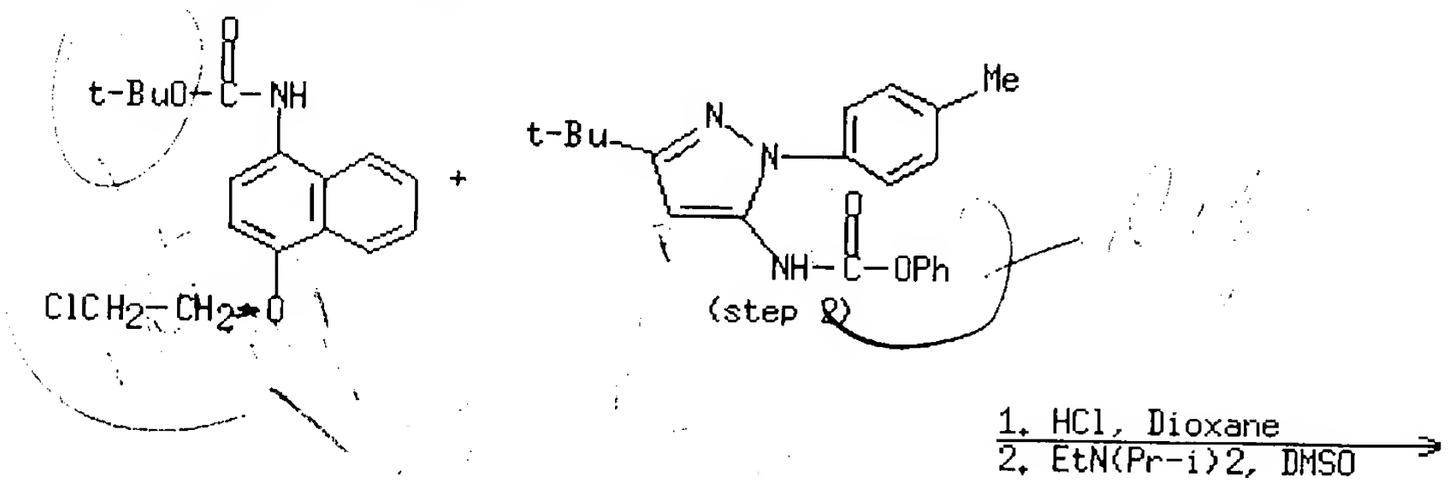
AB Pyrazole compds., e.g. I, as well as bis pyrazole-1H-pyrazole intermediate compds. e.g. II, were prepd. The compds. are useful in pharmaceutic compns. for treating diseases or pathol. conditions involving inflammation such as chronic inflammatory diseases. All prepd. compds. had IC50 < 10 mM for inhibition of TNF.alpha. in lipopolysaccharide stimulated THP cells.

RX(74) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(79) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(82) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(84) OF 282 - 2 STEPS



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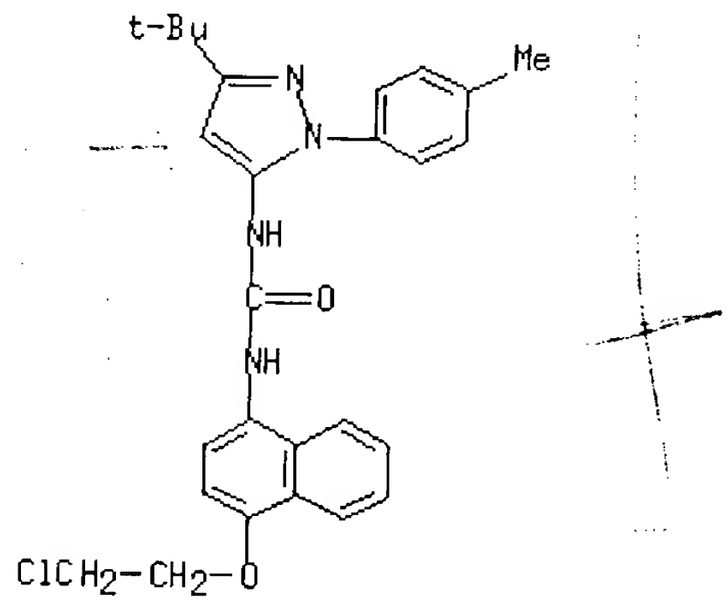


RX(93) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(95) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(96) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(97) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(98) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(105) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(134) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(136) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(141) OF 282 - REACTION DIAGRAM NOT AVAILABLE

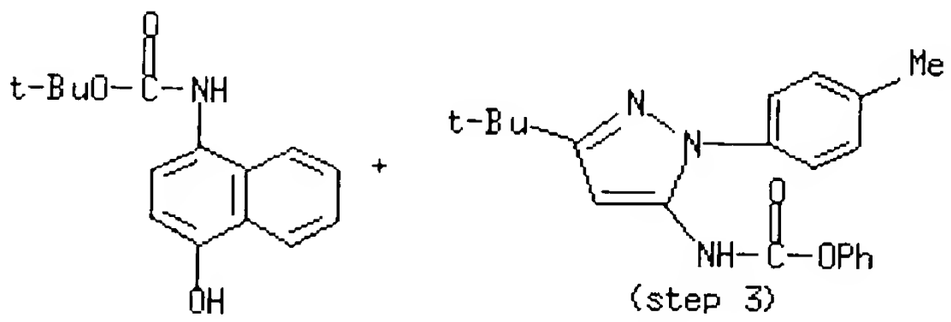
RX(143) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(145) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(147) OF 282 - REACTION DIAGRAM NOT AVAILABLE

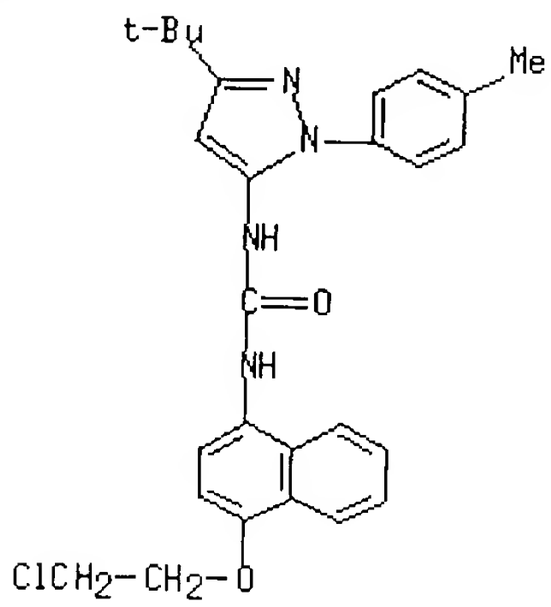
RX(148) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(149) OF 282 - 3 STEPS

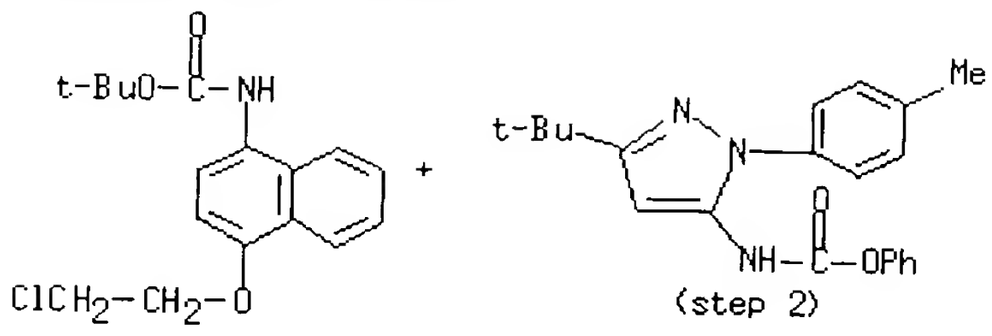


1. BrCH2CH2Cl, K2CO3, MeCN
2. HCl, Dioxane
3. EtN(Pr-i)2, DMSO

RX(149) OF 282 - 3 STEPS

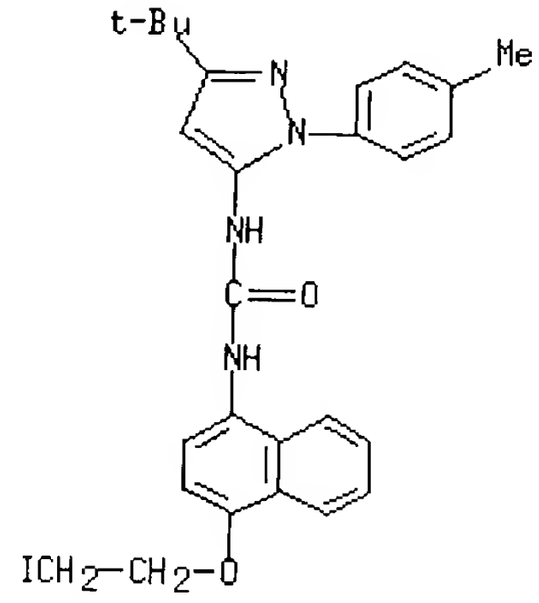


RX(151) OF 282 - 3 STEPS

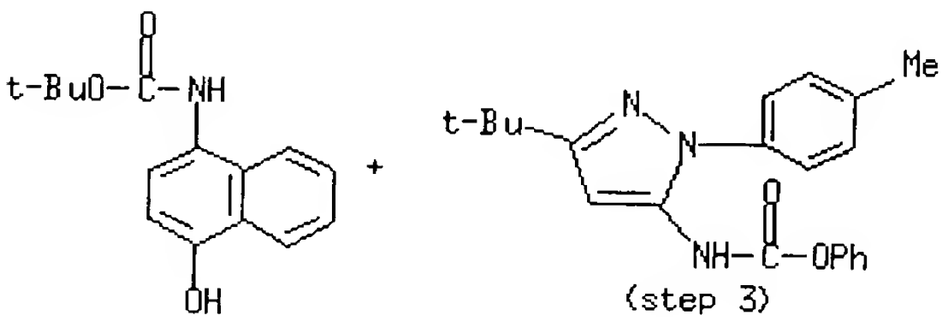


1. HCl, Dioxane
2. EtN(Pr-i)2, DMSO
3. NaI, Me2CO

RX(151) OF 282 - 3 STEPS

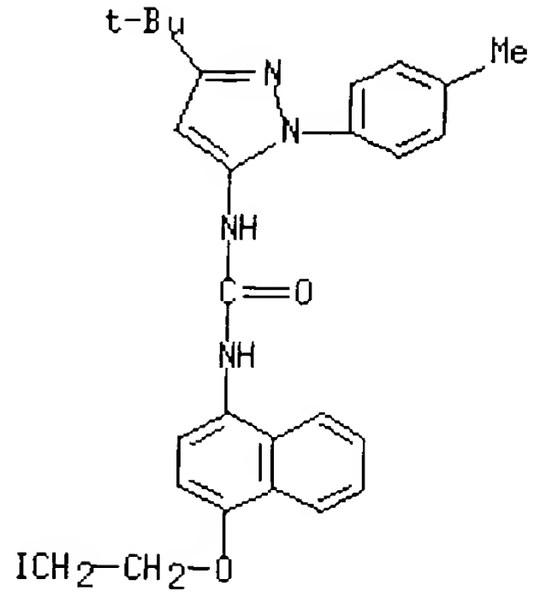


RX(152) OF 282 - 4 STEPS



1. BrCH2CH2Cl, K2CO3, MeCN
2. HCl, Dioxane
3. EtN(Pr-i)2, DMSO
4. NaI, Me2CO

RX(152) OF 282 - 4 STEPS



RX(155) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(156) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(164) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(166) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(167) OF 2
82 - REACTION DIAGRAM NOT AVAILABLE

RX(168) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(169) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(170) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(175) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(176) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(177) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(178) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(179) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(180) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(181) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(192) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(194) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(230) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(231) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(234) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(235) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(238) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(239) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(243) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(244) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(245) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(246) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(247) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(251) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(252) OF 282 - REACTION DIAGRAM NOT AVAILABLE

RX(253) OF 282 - REACTION DIAGRAM NOT AVAILABLE

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REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 3 CASREACT COPYRIGHT 2004 ACS on STN

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ACCESSION NUMBER: 137:119059 CASREACT
TITLE: Pyrazole Urea-Based Inhibitors of p38 MAP Kinase: From Lead Compound to Clinical Candidate
AUTHOR(S): Regan, John; Breitfelder, Steffen; Cirillo, Pier; Gilmore, Thomas; Graham, Anne G.; Hickey, Eugene; Klaus, Bernhard; Madwed, Jeffrey; Moriak, Monica; Moss, Neil; Pargellis, Chris; Pav, Sue; Proto, Alfred; Swinamer, Alan; Tong, Liang; Torcellini, Carol
CORPORATE SOURCE: Research and Development Center, Department of Medicinal Chemistry, Boehringer Ingelheim Pharmaceuticals, Ridgefield, CT, 06877, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(14), 2994-3008
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We report on a series of N-pyrazole, N'-aryl ureas and their mode of binding to p38 mitogen activated protein kinase. Importantly, a key binding domain that is distinct from the ATP (ATP) binding site is exposed when the conserved activation loop, consisting in part of Asp168-Phe169-Gly170, adopts a conformation permitting lipophilic and hydrogen bonding interactions between this class of inhibitors and the protein. We describe the correlation of the structure-activity relationships and crystallog. structures of these inhibitors with p38. In addn., we incorporated another binding pharmacophore that forms a hydrogen bond at the ATP binding site. This modification affords significant improvements in binding, cellular, and in vivo potencies resulting in the selection of Compd. 45 (BIRB 796) as a clin. candidate for the treatment of inflammatory diseases.

RX(67) OF 99 - REACTION DIAGRAM NOT AVAILABLE

RX(86) OF 99 - REACTION DIAGRAM NOT AVAILABLE

RX(88) OF 99 - REACTION DIAGRAM NOT AVAILABLE
REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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